THE UNIVERSITY OF NORTH CAROLINA AT PEMBROKE

Design and Implementation of a Sight-reading Module for Middle School Band

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By

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Sight-reading is one way for middle school band students to demonstrate musicianship. If the students are very good at sight-reading, then the level of musicianship is high. The researcher has created an organized module addressing methods of how to teach middle school band students to sight-read effectively. A working definition of sight-reading is playing a work of music accurately the first time it is seen by a performer. At the middle school level, performers must be able to play a steady beat, play accurate rhythms, demonstrate correct eye movements, and recognize patterns of notes to be an effective sight-reader. The students in this study were exposed to activities and lessons that addressed these four aspects of sight-reading. After the study was concluded, the researcher determined that the sight-reading abilities of the students increased. The students became aware of the skills necessary to be effective sight-readers. The most effective lesson of this study was the rhythm lesson. The least effective lesson was the eye movement lesson. The rhythm lesson allowed the students to become familiar with common rhythms, increasing their abilities to perform those rhythms. The eye movement lesson was difficult for the students to understand and very difficult to measure. The segments on steady beat and melodic intervals presented challenges to the students; however, the students responded well to the lessons developed by the researcher. The students showed significant improvement in their concept of steady beat and understanding of melodic intervals.

Chapter 1
REVIEW OF LITERATURE

Definition of Sight-Reading

Sight-reading is the process by which musicians play a piece of music for the first time with musical accuracy. Stauffer defines sight-reading as "the ability to translate musical symbols and terms into a musical performance using strict time limits" (2005, p. 21). Student musicians have a difficult time learning to sight-read, particularly at the middle school level. Stauffer (2005) gives advice to music educators by pointing out that there are three basic elements to sight-reading. These elements are: rhythmic patterns, scales and chords, and musical terms. Once musicians master these elements, they need to have a process to follow for sight-reading. A simple process, according to Stauffer, is to select simple music, scan thoroughly, and play nonstop. According to Gromko (2004), good sight-readers recognize melodic patterns, play with good time, and look ahead in the music. In his research, Phillips (2007) states that physical agility is a main requirement for sight-reading. However, Phillips also states that sight-reading is mostly a mental activity.

There are a few websites that present practice for sight-reading. Most of these websites use piano skills. At *www.practicespot.com* several notational exercises are presented for practice on the piano. There are two downloads available for MIDI piano: *Sight-reading Studio 1.0 R6* and *Sight-reading Challenge 1.31*. One website provided sight-reading practice for instrumentalists and vocalists. This site is *www.sightreadthis.com* and it is available for $4.95 per year.

There is limited research on sight-reading at the middle school level, and even less literature for teaching sight-reading to middle school band students. That is one of the reasons the researcher chose sight-reading as a topic for this study. Most of the research on sight-reading

addresses piano and keyboard playing. There are a few resources on guitar sight-reading, but these sources are geared toward amateur performers with no experience in reading music. The researcher discovered a few method books for middle school band members to practice sight-reading. The list of these publications is presented in Appendix P.

Four components of sight-reading will be featured in this action research project to present a solution to the problem of limited research on sight-reading in middle school band. These skills are steady beat, rhythm-reading, eye movement, and melodic intervals. All of these components were chosen based on prior research.

Steady Beat

Orff-Schulwerk studies are mostly directed toward elementary music classrooms. However, Misenhelter (2004) has conducted a study on how to use the work of Orff in the instrumental music classroom. Misenhelter (2004) used Orff-Schulwerk strategies to help band students with the concept of steady beat. This researcher used hands-on activities to allow the students to experience steady beat and then transferred their experiences to performing. Students cannot be expected to learn the concept of steady beat while passively listening to lessons on consistent tempo. Active steady beat activities allow students to "internalize pulse and understand meter, time signatures, and tempo" (Misenhelter, 2004, p. 58). An Orff rhythm-circle activity such as a "take-pass" game will allow the students an active participation in learning the concept of steady beat. The "take-pass" game is played by having the students pass a bean bag around a circle to a steady beat of a drum.

In a study done by Stauffer (2005), students were asked to create a steady beat as a group. They were instructed to sit on the very edge of their chair and tap their heels to the steady pulse. The students were expected to create and maintain a steady beat as a group. The researcher

instructed the students to listen and stay in unison with each other. The students were also asked to increase and decrease the tempo together as a group. Stauffer stresses the importance of maintaining a steady beat as a group in his study (2005, p. 21).

A research study done by Rohwer (1998) showed that beginning instrumentalists benefitted from movement instruction. In the study, Rohwer used dances and conducting techniques to enhance the students' concept of steady beat. The results of the study showed that the students who received instruction on movement had an increased sense of steady beat than the control group, who did not receive movement instruction (1998, p. 414).

Emile Jaques-Dalcroze was a musician who saw the need for music instruction to be delivered through physical experience as well as intellectual experience. He developed several theories on instructing children about music at the enactive level of learning called Eurhythmics (Bachmann, 1991, pp. 344 & 345). At the enactive level of learning, students are more attuned to large movements and they relate concepts to those movements.

Dalcroze believed that children in the concrete operational stage of development preferred to learn new music by ear. These children did not sight-read music in the same ways as children do in today's classrooms. Dalcroze developed many activities to teach children how to feel music first—enactive modality. He stated "if we also bear in mind the required coordination of two different types of symbolization—that of musical pitch and all it implies and that of duration—we will unhesitatingly advance by a year or two the point at which the child might be expected to be capable of grasping the principle of musical notation" (Bachmann, 1991, p. 346). Among these activities, Dalcroze included an education in rhythmic physical movement (p. 139). Some of his activities used to train his teachers, or "rhythmicians," involved breathing exercises,

gestures, use of space, and the study of walking and its embellishments. These activities trained the body to move with balance, strength, and natural rhythm (p. 140).

Rhythm-Reading

A strong correlation exists between sight-reading success and a student's ability to recognizing and performing rhythms correctly. Pursell states that "a significant body of research shows that the performance of rhythm is the main variable prohibiting sight-reading success for musicians of all ages" (2007, p. 38). Bruner (1996) introduced the three learning modalities into education circa 1960. These modalities of enactive, iconic, and symbolic, play a significant role in the learning of sight-reading. The intellectual ability of middle school students develops in phases as the mind goes through developmental stages (Bruner, 1996). Bruner suggests that students in middle grades, who are not in the concrete operational stage of development, may need to learn rhythms (a key ingredient in sight-reading) in the enactive and iconic modalities. The enactive modality of learning occurs when the transfer of information uses physical actions. The iconic modality of learning occurs when information transfer uses visual, spatial or graphical illustrations (Pursell, 2007, p. 38). The necessity for middle school students to approach rhythm-reading in a concrete way at first may be advisable. Pursell suggests that rhythmic exercises present in Emile Jaques-Dalcroze's *Eurhythmics* may be the answer to schooling young musicians in the art of rhythm-reading. Summarizing Pursell's and Bruner's research, the researcher concludes that the sight-reading problems that students have are due in part to their developmental stage, concrete operational.

There are many approaches to teaching rhythm-reading. The world of music education has not agreed on one system or school. This may lead to unnecessary confusion for student musicians. "One elementary teacher might use the traditional Kodaly syllables while another in

the same school system uses an Orff-Schulwerk approach" (Ester, 2006, p. 61). Most band directors and other instrumental teachers use counting instead of traditional rhythm systems. Some middle school students, however, are not ready to interpret rhythms using counting systems. These students need to understand where the rhythms come from and how they fit together visually before they can understand how to perform them (Ester, 2006, p. 62).

Dalby (2005) advises band directors to use a good rhythm-syllable system when teaching rhythms to students. Dalby states that attempting to demonstrate new rhythms to students through a mathematical analysis of rhythmic relationships does not work (2005, p. 56). Students do not relate to the abstract concepts of the number of eighth notes in a quarter note. Dalby suggests that "this approach may be ineffective…because rhythm understanding and mathematical thinking are very different cognitive processes" (2005, p. 55). The mathematical understanding behind rhythm durations does not guarantee the ability of the students to perform rhythms correctly.

According to research by Kodaly, rhythm should be tapped or spoken before students see the notation for the rhythm (Howard, 1996). Students can use nonsense syllables to speak the rhythm, or tongue the rhythm while blowing air through the instrument without making sound. Kodaly also suggested chanting the note names and/or fingerings using the correct rhythms. Some note names do not lend themselves to fit in to the rhythms evenly. Kodaly developed altered note names to fit into one syllable (Howard, 1996). A copy of this chart is present in Appendix K.

The use of rhythm syllables to teach rhythmic patterns is important for many reasons. Dalby (2005) states that there are two reasons for teachers to use rhythm syllables. Rhythm syllables are beneficial because they provide a vivid way to experience rhythm and they facilitate

the comprehension and retention of rhythmic patterns. By using rhythm syllables, students build a large vocabulary of rhythm patterns, and the students will be able to notice the similarities and differences between them. There are four characteristics suggested by Dalby (2005) that a rhythm syllable system should have. These characteristics are the syllables are based on how rhythms sounds, not how it is notated; each syllabic sound has a unique rhythm in relation to the steady beat; it is easily understandable and relates to as many meters as possible; and it is conducive to the performance of the rhythms.

Audiation

An innovative way to connect sound with symbol is to use a process known as audiation. Audiation is a term coined by Edwin E. Gordon. Gordon discovered that students learn music in certain ways. He developed circular objectives to teach students the correct sequence to lead to full music comprehension (Gordon, 1989). Audiation takes place when one hears and comprehends music when the sound is not present or may have never been present (Gordon, 1989). Gordon recognizes eight types of audiation. These types include listening to familiar or unfamiliar music, reading familiar or unfamiliar music, writing familiar or unfamiliar music, recalling and performing familiar music, recalling and writing familiar music, creating and improvising unfamiliar music, creating and improvising unfamiliar music while reading, and creating and improvising unfamiliar music while writing (Gordon, 1989). The types are not said to be in a hierarchy, but some types are meant to be a prerequisite for others.

There are six stages to audiation. Each stage serves as a prerequisite for the next. These stages are momentary retention, initiating and audiating tonal patterns and rhythm patterns and recognizing and identifying a tonal center and macro beats, establishing objective or subjective tonality and meter, consciously retaining in audiation tonal patterns and rhythm patterns that one

has organized, consciously recalling patterns organized and audiated in other pieces of music, and conscious predictions of patterns (Gordon, 1989). In this way learning music is a lot like learning a language. The first step that children follow when learning a language is listening to that language. Children will then imitate the fundamentals of that language, after which they will begin to think in that language. The next step is to improvise in that language, then engage in conversations with other speakers of that language. Finally, children will learn to read and write that language and learn about the grammatical structure of said language (Gordon, 1989).

Eye Movement Studies

Goolsby's studies included research about eye movements in music-reading. Goolsby states that the "music reading is a process [that] most successful musicians take for granted. Yet it is a process of which we know very little" (Goolsby, 1989, p. 124). He measured the duration each subject spent on each musical figure using computer-aided technology. Music educators can use eye movement studies in teaching correct eye movements to their students. Eye movements "determine what visual information is made available for perceptual processing, the sequence in which the information is made available, and the duration that the information is made available" (Goolsby 1994, p. 98). Helping students process music-reading quickly and teaching them to move their eyes ahead will create better sight-readers.

Some researchers equate reading music, or sight-reading, with reading words. However, studies done by Goolsby indicated that music-reading is better equated with looking at pictures. Goolsby's studies showed that music written closer together had less fixation time than music written farther apart. Musicians with greater sight-reading skills observe musical notation that is ahead of where they are performing through their peripheral vision. Using peripheral vision, these musicians can keep their place in the music while seeing what came before and what is

coming up (Goolsby, 1994). Meynell urges sight-readers to "read ahead like crazy" (2004, p. 15). Meynell also states that one cannot read ahead while playing too fast.

Goolsby's eye-movement studies provided the music-reading population with information on "what visual information is made available for perceptual processing, the sequence in which the information is made available, and the duration that the information is made available" (1994, p. 98). These data have led Goolsby to determine that music-reading does not employ any of the cognitive processes used to perform that music. Music-reading uses separate portions of the brain than music performing. However, Goolsby did determine that eye-movements relate to the effectiveness with which musicians sight-read.

In Goolsby's results, less-experienced sight-readers read music note by note with a lot of time spent on each note (1994, p. 97). Skilled sight-readers look far ahead as they perform and their eyes return to the place where they are playing more often. As mentioned before, music-reading is very different from language-reading. Goolsby discovered that highly-skilled sight-readers focus on blank areas between notes, not directly on the notes themselves (1994, p. 97). Unskilled or less-experienced sight-readers focus on the notes or the concentration of ink on the page as language-readers do.

Melodic Intervals

Related to Dalcroze's research, Bernhard (2006, p. 70) discovered that relationships between common pitches helped students identify melodies and sing them with better accuracy. Bernhard's studies allowed him to determine that playing music by ear, without notation, may be a key ingredient in developing good sight-reading technique. Bernhard further suggests that "students are allowed and encouraged to use instruments as tonal crutches by primarily associating notation with correct fingerings—not the correct sound" (2006, p. 71). Bernhard also

brings to light the fact that students who are successful at sight-reading are students who are independent musicians. They then have a desire for learning more about music and furthering their talents.

Zoltan Kodaly believed that even children in an instrumental music program should learn to sight-sing (Howard, 1996). Kodaly advocated the movable *Do* solfege system. The movable *Do* system used the concept that Do is the tonic of the key and all pitches are relative to the tonic. Kodaly's concept of music learning follows a basic sequence: "hear the music, move to it, sing it, write it, and finally play it" (Howard, 1996, p. 28). In addition, learning Kodaly hand symbols that correspond to pitches in the movable do system allows students the opportunity to visualize the distance between notes. Matching a physical movement to the sound will also allow the students to understand the connection between sound and sight.

The skill of learning melodic intervals can be practiced by rehearsing and sight-reading canons and folk music (Howard, 1996). Learning major and minor scales and the related arpeggios will allow the students an easier time in sight-reading. Kodaly also suggested learning a pentatonic scale in solfege and then transposing to other keys, because pentatonic scales are easy for students to hear and sing (Howard, 1996).

Conclusions

Effective sight-readers need to be familiar with rhythm, steady pulse, melodic intervals, and proper eye movement. These elements of sight-reading combine in a logical order for instruction. However, Bruner's idea of a spiral curriculum should be considered when establishing a sight-reading curriculum (1996). A spiral curriculum is one in which the basic ideas and elements are revisited repeatedly to build upon them until the students have mastered them (Bruner, 1996). All of the studies and activities present in this review of literature are very

easily repeated for mastery. It is recommended by most of the aforementioned researchers that the skills learned be rehearsed until there is measurable mastery by all students.

Chapter 2
RESEARCH DESIGN/METHODOLOGY

Subjects Used

The action research conducted in this study engaged participants from Pembroke Middle School band who were in their first, second, or third year as instrumentalists. Feedback from other area middle school band directors was collected and considered in this study. All participants signed participation agreement forms. The parent of the participants also signed forms agreeing to allow their children to participate in this project. Participants also gave permission for their photos to be used in Appendix I of this thesis.

Research Questions

The researcher of this study attempted to answer the following questions: what does prior research identify as effective methods for teaching middle school band members to sight-read? What skills are required for musicians to sight-read a musical composition with accurate dynamics, rhythm, notes, and expression? What are the musical characteristics for etudes or exercises that would address sight-reading skills? What are some examples of band compositions that meet these criteria?

Research Design

Steady-beat exercises like those of Dalcroze have shown influence on students' sight-reading abilities (Bachmann, 1991, p. 73). A unit based on the research of Dalcroze was present in this study. The unit included movement and improvisation activities with steady-beat emphasis. The researcher conducted a pre-test in which the students' concept of steady beat was tested by having the students clap along with a metronome and continue clapping the steady beat once the metronome was turned off. The researcher implemented some of Dalcroze's Eurhythmic techniques to improve on steady beat. The activities used include breathing

exercises, gestures, use of space, and the study of walking and its embellishments. For the breathing exercises, the researcher discussed phrasing with the subjects. The participants were asked to breathe in for a number of measures of the metronome clicks and then breathe out a number of measures of metronome clicks. This exercise started with a small number of measures and increased gradually as the subjects increased in proficiency. For gesture exercises, the subjects were asked to conduct in two time signatures. The researcher demonstrated the conducting gestures for 4/4 time and the subjects practiced this until they were comfortable. Then the researcher demonstrated the conducting gestures for 3/4 time. All conducting practice was done with the aid of a metronome. Learning conducting gestures allowed students to become very familiar with the researcher's conducting style while learning steady beat placement during a work of music. Participants were asked to march and walk in time to a metronome using the entire space of the room. Students were also asked to conduct the rehearsed patterns while walking or marching. Using the entire body to produce a steady beat allowed the participants to practice feeling and maintaining the steady beat. The students were given a post-test after the completion of these activities. Both the pre-test and post-test was recorded in audio format for comparison.

Based on the studies of Pursell, this action research project included exercises in iconic-based rhythmic instruction and a syllabic rhythm system. Studies show that "A significant body of research shows that the performance of rhythm is the main variable prohibiting sight-reading success" (Pursell, 2007, p. 38). Iconic-based rhythmic instruction includes visual, spatial, or graphic representations of rhythm rather than symbolic. In the pre-test and post-test, the students sight-read lines from Appendix B. The pre-test readings were recorded and compared to the post-test readings. Activities based on Pursell's research included: learning rhythmic

combinations by ear through the use of syllables, learning rhythmic combinations using iconic memory techniques, and practicing rhythms using symbolic representation. The researcher created a chart of common rhythmic combinations for drill and practice and used syllables based on pie ingredients to teach the participants the proper placement of each note against a steady beat. The syllables based on pie ingredients were chosen because they are easy to remember and the syllables of the words line up with the rhythms chosen in the rhythm chart. An example of the syllables used is the word "pie." The word "pie" is used to represent quarter notes. By saying the word "pie" against a steady beat, the students can accurately represent quarter notes.

The researcher drew upon the findings of Pursell to use concrete materials to represent the rhythms in the rhythm chart. The researcher created tangible representations of steady beat using Popsicle sticks. Tangible representations of the rhythms were made from notes printed on cardstock in the exact length of beat they represent when compared to the steady beat. After the subjects learned the rhythms from the rhythm chart in audio form and practiced them many times, the researcher used the tangible/iconic forms of the notes to give the subjects a visual representation of the rhythms over time (against the steady beat). After significant practice was given to these activities, the researcher displayed the rhythms from the rhythm chart on the Smart board for the subjects to practice using the symbolic representations of the rhythms. For the post-test, the researcher used the same rhythms test in Appendix B to determine if the students increased their understanding of rhythm reading. These readings were recorded and compared to the pre-test.

Eye movement studies have shown that people who are more skilled at reading music "look ahead" while doing so (Goolsby, 1989). A unit based on the research of Goolsby was present in this study. The unit included drills on eye movements during sight-reading. The

researcher conducted a pre-test by using Smart board technology to display 12 measures of music for the entire class. The participants were pre-tested on their ability to continue playing one measure after the display is turned off. The researcher provided strategies and practice for reading ahead. Practice exercises included in Appendix D were used to rehearse moving the eyes ahead while reading music. The researcher also used an excerpt from Appendix D to display on the Smart board while playing a recording of the excerpt. The researcher demonstrated to the subjects how their eyes should move while playing the excerpt by using a pointer to represent eye movement. Practice on the other exercises in Appendix D was repeated until subjects showed satisfactory comprehension of the eye movement skill. Participants were then given a post-test to determine the effectiveness of the unit. The pre-test and post-test was recorded in audio format for further review and comparison.

The researcher designed activities based on melodic ear training research as presented by Bernhard (2006, p. 70). This research suggested that there is a "relationship between tonal understanding and abilities to perform melodies of Western culture by ear." The pre-test in Appendix E was given to the students in which they identified intervals (octave, third, and fifth) by sight and sound. Activities included exercises in which students learned how to identify musical intervals by ear and by sight. The researcher started with the activities that taught the subjects how to identify intervals by ear. The researcher used Kodaly hand symbols to represent the melodic intervals. The participants were instructed on the notes that the hand symbols represented and the researcher used this knowledge to practice moving through the intervals on the instruments. Pictures of this activity are included in Appendix I. Preceding the visual representation of the intervals, the researcher gave the subjects worksheets (included in Appendix G) to rehearse movement from one note of the interval to the other. Then the

researcher used the worksheet in Appendix F to visually represent the intervals for the participants. The post-test was the same as the pre-test and included identifying intervals by sight and by ear. Results of the pre- and post-tests are presented in graphic form in Appendix H.

A summary of results are presented in charts, graphs, tables, and documented in audio recordings. Students took an initial survey about sight-reading in a general sense. They also completed a final survey to determine their feelings and opinions after the completion of the module. The completed module and results were shared with local band directors. The participating band directors completed a survey relating to their opinions about the effectiveness of the module.

Chapter 3

CONCLUSIONS AND DISCUSSION

After conducting this action research project, the researcher concluded that the module on sight-reading was successful. The students could sight-read better at the end of the module than they could at the beginning of the module. All post-tests showed improvement from the pre-tests. The researcher spent six weeks on the implementation of this action research project. The students were on an A-day/B-day schedule which means that the researcher saw the same children every other day. Six weeks was not a long time for this research project to be implemented. The researcher feels that this study would yield better results if the study was extended to a full school year. Perhaps further studies can include an extended period of time for the module.

The researcher believes that more review of the specific skills present in the module would yield more effective results in the classes. The students would benefit from reviewing the previous skills in the module many times throughout the course of learning the other skills in the module. Further studies should be done to include constant review and practice of the skills learned.

The musical characteristics of etudes or exercises for middle school band should include a slow tempo; challenging rhythms and rest patterns; the key of B-flat, E-flat, or F; and they should include melodic patterns and sequences. Some examples of band literature that meet these criteria include *The Tempest* by Robert W. Smith, *African Folk Trilogy* by Anne McGinty, *Who Let the Elves Out* arranged by Victor Lopez, and *Revenge of the Dust Bunnies* by Dan Adams. Some method books that include excellent material for sight-reading practice are *101 Rhythmic Rest Patterns* by Grover C. Yaus, *Band Technique Step-by-Step* by Robert Elledge &

Donald Haddad, and *Improve Your Sight-reading!* by Paul Harris. For a complete list of related publications for sight-reading see Appendix O.

There is also software for PC and MacIntosh available to help students practice sight-reading. An example for PC is Alfred Publishing's *Interactive Musician*. For the MacIntosh platform computers students can use *Logic Pro 8* by Apple Computers to enhance sight-reading skills. This program includes an interface with MIDI. MIDI stands for Musical Instrument Digital Interface. Usually MIDI includes a keyboard, but there is also a wind instrument available for interfacing.

Surveys

The researcher surveyed 59 students from the Pembroke Middle School band before the action research project began. The first question of the initial survey asked students to define sight-reading in their own words. Out of the 59 students who were surveyed 19 gave a statement that was very close to the definition of sight-reading set forth in this research project. Of the 59 students, 35 stated that they did not know what sight-reading was or they did not attempt to define it. Five students gave answers that were unrelated to the general topic of sight-reading. After the lessons in the module were applied to these students, the students answered this question differently. Of the 59 students surveyed after the conclusion of this study, 49 students gave an accurate definition of sight-reading. Seven students responded with unrelated answers and three left the question blank.

The second question on the initial survey asked students to list skills that they found necessary to good sight-reading. Out of 59 responses, 34 students said that they did not know how to answer the question. There were 25 students who gave responses that were close to the answers that the researcher had in mind. Some of these responses were to practice more and

read/learn notes on the respective instruments. The question that pertains to skills of effective sight-readers was slightly different on the final survey. The question asked the subjects which skills they thought had the best impact on creating effective sight-readers. Of 59 responses, 20 students said all of the skills were important, 10 students stated that rhythm was the most important, nine responses said that steady beat was the most important, and 10 students responded with melodic intervals as the most important skill.

In the third question, the students were asked if they felt they were an effective sight-reader. Out of 59 students, 21 said yes they thought they were effective sight-readers, 18 said no, and 20 said they didn't know if they were effective sight-readers. When asked after the module if the students thought the module made them a better sight-reader, 52 students said that yes, the module made them a better sight-reader. Only seven students stated that they did not improve their sight-reading skills as a result of the module.

Question four of the initial survey asked the students why they thought sight-reading was an important skill. Of the 59 initial surveys, 29 of the responses revolved around becoming a better musician, and 30 responses were of the "I don't know" variety. The fourth question of the final survey asked students to testify as to what the module showed them about the importance of sight-reading. Of the 59 final surveys, 35 students stated that being an effective sight-reader will make them a better musician. Five students stated that this study showed them that they were not good sight-readers, and 19 students simply stated that it is important.

In the initial survey, the final question asked students how they can improve their sight-reading skills. Out of 59 surveys, 25 students said they did not know, 30 said by practicing they can improve their sight-reading skills, and four said they can improve their skills by learning what sight-reading is. Of the students who stated that they did not know, a few stated that they

did not understand the question. Five of the students who said that practice will make them better sight-readers, also said that playing a different instrument than what they currently play will help them sight-read better. In the final survey the last question asked how their sight-reading skills were improved. Of the 59 students surveyed, 30 students said by participating in the action research project their sight-reading skills were improved, eight stated that their skills were not improved, three stated they did not know if their skills were improved, and eight students left the question blank.

The researcher sent 15 local middle school band directors the module and a survey to fill out after they evaluated the module. Of the 15 band directors, only 2 returned the survey. Both band directors rated the overall effectiveness of the sight-reading module as a four on a scale of zero to five (five being the most effective and zero being not effective at all). One band director rated the overall effectiveness of the exercises as a three, while the other band director rated the exercises as a five. The eye movement exercises were rated a three by both band directors. The steady beat and rhythm exercises were rated a four by one band director and a five by the other band director. The melodic ear-training exercises were rated a five by both band directors. The overall design of the module was rated a four by one band director and a five by the other band director. One band director rated the effectiveness of the instructions in the module as a four, while the other band director rated the instructions as a three.

Steady Beat Lessons

The researcher defined the term steady beat for the students. Steady beat was defined as a consistent and steady pulse. The researcher also defined the term sight-reading. Sight-reading was defined as playing music for the first time as accurately as possible. Students were asked to perform a pre-test of steady beat knowledge by clapping along with a metronome that was

projected onto a Smart board at the front of the classroom. The researcher turned the metronome off and on throughout the pre-test to determine if the students were able to clap the steady beat without the metronome. All of the students increased the tempo (the speed) of the steady beat when the metronome was turned off. When the metronome was turned back on, most students became confused with the pulse and it took several seconds to get the steady beat back on track.

Next, the researcher had the subjects play a B-flat concert pitch on their instruments in quarter notes to the steady beat created by the metronome. The researcher turned the metronome on and off during this exercise also. The students were considerably more consistent with the steady beat when they were playing than when they were clapping. The researcher hypothesizes that this was so because the students concentrated more when they were playing then when they were clapping. Also, the students took the playing more seriously than the clapping.

The researcher used the metronome, with varying tempi, during the entire rehearsal. Over the course of the rehearsal, the students became dependent on the sound of the metronome and by the end of the rehearsal were able to keep a consistent tempo without the metronome. In the next rehearsal, the researcher reviewed the definition of steady beat by asking a student to give the definition. The students were also asked the definition of sight-reading and metronome. Students were assessed individually on their ability to keep the steady beat. The researcher went around the classroom and had each student keep the beat with the metronome. Most students were able to keep the beat steady without trouble. A few had problems finding the steady pulse, but the other students in the class tried to help out by clapping it for the student in question.

The researcher then talked about the importance of conducting. Students were taught the fundamentals of conducting a 4/4 pattern. The conducting pattern was practiced to the steady beat of the metronome. Then students were asked to volunteer to conduct the ensemble while

the ensemble played quarter notes to the steady beat. The subjects were asked to conduct the ensemble with and without the metronome. This was at first met with some hesitation, but as the class got used to seeing their peers in front of them, the students got braver and better at conducting the ensemble.

The students enjoyed conducting for their peers. Their conducting patterns were not as accurate as they could be, but the steady beat became very accurate as they conducted numerous times. During the conducting exercises, the researcher instructed the students on the use of phrasing in music. The researcher described phrasing as musical sentences. The researcher instructed the students to breathe in for four beats and out for eight beats. The students rehearsed this breathing technique for two rehearsals, and then the students played their instruments in the same manner as the breathing exercise. The researcher divided the groups in half and had some students conduct while the others played the phrasing exercise. A post-test was conducted after the use of phrasing was discussed. All students were assessed individually and all students were able to keep the steady beat while the researcher turned the metronome on and off.

The researcher reviewed the concept of steady beat throughout the duration of this action research project. The students' concept of steady beat got increasingly better as the project went on. Everyday the students were asked to give a definition of sight-reading, steady beat, and metronome in their own words. Students were eager to answer and give the researcher the definition of sight-reading, steady beat, and metronome. The definitions were very accurate, although they varied from class to class and day to day. The researcher chose a different student to answer for each class meeting to ensure comprehension of the entire class. Students were also asked to conduct the warm-ups for the entire ensemble for each rehearsal. While conducting the warm-ups for the rhythmic section of the module, students who conducted started to assess the

rhythmic accuracy of the students who were playing. The students made comments to the researcher about how much more they understood the concept of time while they conducted.

Rhythm Lessons

The researcher defined the term rhythm as a pattern of beats performed against a steady beat. The students were given a pre-test on reading rhythms. The pre-test (which is included in Appendix B) was too difficult to present to the students at that point in the study. The researcher should have given a pre-test with only rhythms and no note variations. In two of the classes, the researcher had to instruct the students to clap the rhythm and not worry about the notes. These classes could not even get past the first measure. Most of those students gave up before they even attempted to play the exercise.

The researcher then presented the rhythm chart to the students aurally by clapping. The chart was demonstrated for the students against a steady beat, and then the students echoed each rhythm back to the researcher. The students clapped the rhythm chart very well, but some of the students sped the tempo up for the more difficult rhythms. The rhythms that the students did not clap accurately were gone over again and again until comprehension prevailed. The researcher then introduced the syllables to the students. Each rhythm from the chart was clapped and the syllables were stated out loud against a steady beat from the metronome.

Each time the classes met, the terms of the research project were reviewed (sight-reading, steady beat, metronome, and rhythm). In the next lesson, the students were introduced to the rhythms from the chart by sight. The researcher explained which syllable represented which rhythm, and the classes clapped the rhythms again. The rhythms were then put in various orders on the Smart board and the students were asked to say the syllables for each measure. It took the students a few times to get all of the syllables correct. The students were given a chance to

create their own versions of the rhythms with cards designed by the researcher. The students were anxious to create the measures and their ability to read the rhythms increased after three lessons. The researcher played a game with the students that used the rhythm cards to create two measures of rhythms. During the rhythm game, many students had trouble clapping the correct rhythms. When the researcher reduced the requirement from two measures to one measure, the students had an easier time clapping the rhythms.

In order for the students to practice reading the rhythms from the rhythm chart, the researcher created more worksheets for the students to clap and play, and the researcher used *101 Rhythmic Rest Patterns* by Grover C. Yaus to rehearse the rhythms (examples of the pages used are presented in Appendix L). When using the Yaus book, the researcher started with very easy rhythms on the first two pages of the book. Once the classes played through the lines of the easy rhythms accurately, the researcher had the students say the syllables of the more difficult rhythms out loud. The students became more accurate as they learned how the rhythms fit into the steady beat and became familiar with how the rhythms looked on the paper. The researcher-generated exercises were easier for the students to play. This may be so because these rhythms were very repetitive and all of the rest were consistent in how they were presented. The students had difficulty initially in reading the variation of rests presented in the Yaus book.

The post-test for this part of the study was a little better than the pre-test. The researcher hypothesized that this was so because the students were not ready to read notes and rhythms together. The researcher gave the post-test again after melodic intervals were discussed and the results were better. In future studies, the researcher suggests that only rhythmic patterns be presented to the students at this point in the study.

Eye Movement Lessons

The pre-test for the eye movement study was very unsuccessful. Students had trouble comprehending the task of looking ahead in the music. When the researcher instructed the students to continue playing after the display was covered, all of the students stopped playing. The students stated that they could not remember the music when they were questioned as to why they stopped playing. The researcher then demonstrated the proper eye movement of a skilled sight-reader by showing the display of Appendix D and playing a recording of Appendix D (section A) while pointing to the music. The students seemed to demonstrate a better understanding of proper eye movement after seeing the demonstration. However, when asked to practice the skill of proper eye movement, many students still were unclear as to the task.

The researcher used words and pictures to describe how to movement the eyes during sight-reading, but only a few students grasped the concept. The researcher believes that many of the students do not know enough about music reading and playing their instrument to be secure enough to look ahead while playing. The students who did understand the concept of looking ahead were the students who display exemplary skills on their instrument and have a background in piano.

The first-year students were the ones who had no luck in learning this skill. Many of them were still trying to figure out the names of the notes. The researcher tried to explain to them that they did not have to stare at a whole note while they were playing it, but several students in the first year of playing were not ready to move on to the skill of looking ahead. These students had an easier time of looking ahead when they were asked to clap rhythms instead of play. The researcher believes that the added element of playing the instrument was too much for them to process because they are beginning band students.

The second- and third-year students had an easier time with the concept of looking ahead. There were still some students who were simply not ready for this step. These were the students who still struggle with the notes and reading music fluently. Many of these students understood what the goal of reading ahead was and how to accomplish it, but they just did not have the skills necessary to achieve it. These students too did better when faced with only rhythms to clap. The researcher combined saying the syllables for rhythms out loud with the eye movement exercises. The students had a lot of fun with this, and their "looking ahead skills" seemed to develop more. Although the students could say the syllables of the rhythms, it was more difficult for the students to clap and play those same rhythms while practicing the looking ahead technique. The researcher also tried different tempi with the students to determine if the music was too fast for them to process. Slower tempi worked the best for eye movement studies.

The post-test of this section of the study was a little better than the pre-test. Not a lot of time was spent on this concept due to the deadline of this thesis. With more time spent on this section, the researcher believes that better results can be achieved. This section of the project was also difficult to measure. The researcher found it difficult to calculate whether the students were looking ahead or simply guessing accurately as to what the next note may be.

Melodic Intervals Lessons

During the pre-test of this section of the research project, only a handful of students guessed correct answers. Of the students who answered correctly, the proper names of the intervals for the pre-test were misrepresented, but they could list the distance between notes in numbers. After the definition of interval and the proper names of the four intervals to be studied were given, students wanted to go back and correct their mistakes because they discovered how easily the naming of intervals came to them.

The researcher demonstrated the intervals on a xylophone while the classes stood around that xylophone and observed. The researcher gave each student a chance to play an interval on the xylophone. All of the students played the correct interval when asked. The researcher then demonstrated to the students how to find intervals without the aid of a keyboard instrument by displaying a staff with notes on the Smart board and counting the distance between notes. After a few examples, the researcher asked the students to tell the intervals. The students caught on very quickly and were accurately naming intervals with few mistakes.

The students practiced naming intervals using the worksheet in Appendix F. The researcher asked for volunteers to answer the name of the interval for each measure in the worksheet in Appendix F up to measure eight. The researcher then instructed the students to play the scale exercises from Appendix G. The students were asked to name the interval in the first section. All of the students who were asked responded to the question accurately. The ensembles played through the first section with few mistakes. Most of the trumpet players missed the B-natural and a few of the clarinet players missed the B-natural. When the students played this section again, the students performed it with near-perfect accuracy.

In section two, the students accurately identified the syllable that matches the first rhythm. The students were asked to identify the intervals in section two. Only a few students answered incorrectly. The students had to play through this section three, and sometimes four, times in every class to obtain a satisfactory level of completion. The researcher attributes this to the fact that the students do not play rhythms with sixteenth notes very often. Section three of the worksheet also presented similar problems for the students. This section also had to be rehearsed several times for the comprehension level to be satisfactory. The students were able to

clap the rhythm of section three correctly, but the added element of playing an instrument presented a challenge for most students.

The students sight-read section four of the worksheet very well. This section did not include any complex rhythms. The researcher believes that this section was the easiest for the students because the exercise only included eighth notes. The last few measures of the example four utilized all of the intervals present in the last section of the study. The students readily identified the names of the intervals. Every student correctly identified these intervals. Some students had difficulty playing the octave intervals on their instruments. This is due in part to their lack of experience on said instrument. The beginning students had the most trouble playing the octave intervals of the exercise. The more experienced players had a less difficult time playing the octaves.

The classes played through the scale exercises in E-flat and F also. These key signatures presented unique and expected challenges to the students. The beginning students had the most difficult time with these key signatures. Some of the notes in the keys of E-flat and F are not known to the very beginning musicians yet. The method book used by the researcher presents the notes in a specific sequence and did not present some of the notes in these keys on the pages that the students have rehearsed and learned in class. The more experienced student musicians had less trouble with these key signatures because they have learned all of the notes, played songs in those keys, and practiced the scales corresponding to those keys.

The researcher presented the Kodaly hand signals to the students. The students were instructed to sing the pitches of Do, Re, Mi, and Sol. As the students were singing the pitches, the researcher demonstrated the hand signals for these pitches. The researcher then asked the students to imitate the hand signals. The hand signals gave the students a visual representation

of the pitches that they played. Not much time was spent on the Kodaly hand signals in this research project. The researcher intended to use the hand signals to review intervals and create a unique warm-up for the students throughout the course of the project. Time was a factor in how much material was covered for this research project.

The post-test for the melodic intervals study was better than the pre-test. There were only a few students who could not identify the intervals by sight. The majority of the students could identify the intervals by sound. All of the students could play the exercises in Appendix G with increased accuracy. Students started to recognize patterns in the music they were rehearsing for their winter concert. They also recognized melodic patterns in the method book. Some students realized and commented on how recognizing patterns in music can help them sight-read better.

Chapter 4
BIBLIOGRAPHY

Bachmann, M. L. (1991). *Dalcroze today: An education through and into music*. Oxford, NY: Oxford University Press.

Bernhard, H. C. (2006). The long-term effect of tonal training on the melodic ear playing achievement of beginning wind instrumentalists. *Journal of Band Research, Vol. 42 (1), p. 70-79*. Retrieved on March 17, 2008 from ERIC.

Bruner, J. S. (1996). *The culture of education*. Boston, MA: Harvard Press.

Dale, M. (2001). *Eurhythmics for young children*. Biblio Distribution.

Dalby, B. (1999). Teaching audiation in instrumental classes. *Music Educators Journal, Vol. 85 (6), p. 22-25*. Retrieved on September 3, 2008.

Dalby, B. (2005). Toward an effective pedagogy for teaching rhythm: Gordon and beyond. *Music Educators Journal, Vol. 92 (1), p. 54-60*. Retrieved on October 30, 2008.

Ester, D. P., Scheib, J. W., Inks, K. J. (2006). Takadimi: A rhythm system for all ages. *Music Educators Journal, Vol. 93 (2), p. 60-66*. Retrieved on September 3, 2008.

Findlay, E. (1971). *Rhythm and movement: Applications of Dalcroze eurhythmics*. Summy-Birchard Co.

Goolsby, T. (1989). Computer applications to eye movement research in music reading. *Psychomusicology, Vol. 8 (2), p. 111-127*. Retrieved on January 27, 2008, from PsycARTICLES database.

Goolsby, T. W. (1994). Profiles of processing: Eye movements during sight-reading. *Music Perception, Vol. 12 (1), p. 97-123*. Retrieved on January 27, 2008, from ERIC.

Gordon, E. E. (1989). Audiation, imitation, and notation: Musical thought and though about music. *American Music Teacher, Vol. 38 (5), p. 16*. Retrieved on September 20, 2008.

Gromko, J. E. (2004). Predictors of music sight-reading in high school wind players. *Journal of Research in Music Education, Vol. 52 (1) p. 6-16*. Retrieved on January 23, 2008, from ERIC.

Hiatt, J. S. & Cross, S. (2006). Teaching and using audiation in classroom instruction and applied lessons with advanced students. *Music Educators Journal, Vol. 92 (5), p. 46-50*. Retrieved on September 3, 2008.

Howard, P. M. (1996). Kodaly strategies for instrumental teachers. *Music Educators Journal, Vol. 82 (5), p. 27-33*. Retrieved on September 3, 2008.

Jaques-Dalcroze, E. (2007). *The eurhythmics of Jaques-Dalcroze*. New York, NY: Wildside Press.

Jordan-Decarbo, J. (1986). A sound-to-symbol approach to learning music. *Music Educators Journal, Vol. 72 (6*), *p. 38-41*. Retrieved on September 20, 2008.

Kopiez, R. & Lee, J. I. (2006). Towards a dynamics model of skills involved in sight reading music. *Music Education Research, Vol. 8 (1), p. 97-120*. Retrieved January 24, 2008 from ERIC database.

Liperote, K. A. (2006). Audiation for beginning instrumentalists: Listen, speak, read, write. *Music Educators Journal, Vol. 93 (46), p. 46*. Retrieved on September 3, 2008.

Newton, C. K. (2004). Successful sight-reading at your next festival. *Teaching Music, Vol. 12 (1), p. 26.* Retrieved on January 23, 2008, from ERIC.

Meynell, A. (2004). *The rhythm of life*. Kessinger Publishing, LLC.

Misenhelter, D. (2004). Orff techniques to freshen up band rehearsal. *Teaching Music, Vol. 12 (2), p. 56-61*. Retrieved on October 30, 2008.

Phillips, K. H. (2007). *Exploring research in music education and music therapy*. Oxford University Press.

Price, H. E., ed. (1998). *Music education research: An anthology from the journal of research in music education*. Rowman and Littlefield Education.

Pursell, A. (2007). The effectiveness of iconic-based rhythmic instruction. *Journal of Band Research, Vol. 43 (1), p. 38-53*. Retrieved on March 17, 2008 from ERIC.

Rohwer, D. (1998). Effect of movement instruction on steady beat perception, synchronization, and performance. *Journal of Research in Music Education Vol. 46 (3), p. 414-424*. Retrieved on November 2, 2008.

Saffir, K. (1972). Sight-reading: Never mind the notes. *Music Journal, Vol. 30 (2), p. 24-26*. Retrieved on January 27, 2008, from ERIC.

Smith, M. K. (2002). Jerome S. Bruner and the process of education. *The encyclopedia of informal education*. Retrieved on March 24, 2008 from http://www.infed.org/thinkers/bruner.htm.

Starer, R. (1985). *Rhythmic training: Student's workbook*. Hal Leonard Corp.

Stauffer, D. (2005). Learning to read music fluently. *Music Educators Journal, Vol. 92 (1), p. 21*. Retrieved on January 24, 2008 from ERIC.

Yaus, G. C. (1981). *101 Rhythmic Rest Patterns*. Belwin Mills Publishing Corp.

Yelin, J. C. (1994). *Movement that fits: Dalcroze eurhythmics and the Suzuki method*. Warner Bros.

Appendix A
MODULE OF ACTIVITY LESSON PLANS

Introduction

This module includes lesson plans for activities to address methods of how to teach students to sight-read effectively. These activities are designed based on researched methods of effective and efficient sight-reading skills. The activities included in this module may be used in-sequence as a part of a sight-reading unit, or out-of-sequence combined with other lessons. Materials that will be needed to complete the activities are included at the end of this module. In addition to these activities, the researcher used *Standard of Excellence Book 1* as a method book for instruction. Teachers can access a free metronome at *metronomeonline.com* or *webmetronome.com*. A free metronome can be downloaded to any computer from the Japanese website *http://www1.ocn.ne.jp/~tuner/tuner_e.html*.

Activity 1 – Steady Beat

Purpose: Skilled sight-readers have a concept of steady beat. The purpose of this activity will be to practice creating a steady beat alone and in a group setting to improve sight-reading abilities.

Materials Needed: Metronome, floor space, definitions of sight-reading: playing a piece of music for the first time with few mistakes; steady beat: a consistent tempo; metronome: an electronic device used to produce a steady beat.

Teacher Directions

1. Pre-test students' ability to keep a steady beat by having the students clap along with a metronome and continue clapping the steady beat after the metronome is turned off. Make sure that students are clapping to the beat set by the metronome before turning off the metronome. Record the pre-test in an audio format to compare to post-test.

2. Give students the definition for sight-reading, steady beat, and metronome. Each day review the definitions of these terms. Have students practice clapping to a metronome, periodically turning the metronome off then back on. The objective for this activity is for the students to keep the steady beat going when the metronome is turned off. Practice this over the course of several lessons.
3. Have students play along to the steady beat created by the metronome. Students should play B-flat concert in quarter notes and keep the steady beat going when the metronome is turned off. Make sure the metronome is loud enough for the students to hear over their playing.
4. Assess each student's ability to keep the beat with the metronome on an individual basis. Depending on class size this can take a while. In order to keep students on track, have all students clap a steady beat and walk around to each student individually to see their version of the beat to determine accuracy.
5. Discuss the use of phrasing in music. Tell students that phrasing is a way of creating "sentences" in music. Do breathing exercises using the metronome. For the first exercise, have the students breathe in for four metronome clicks (moderate tempo), then hiss out for eight clicks. Extend the number of clicks as the students catch on to phrasing/breathing in time. This can be done over several rehearsals.
6. Have the students play on a B-flat concert quarter notes in the same fashion of the phrasing. Extending the amount of measures that a student can play in one breath has many benefits.
7. Get the students out of their seats and onto a large floor space. Instruct them to march around to the beat of the metronome, accenting beat 1. Try this exercise in groups of four

beats. Tell students not to stomp, but to create a smooth consistent tempo. If floor space is limited, students can march in place.

8. Demonstrate conducting of a four-beat pattern. Instruct students to mimic the four-beat pattern. Put the metronome on 84 and have the students conduct in 4/4 time to the music. Repeat the activity until students are comfortable with the conducting patterns.
9. Review the conducting patterns in the next lesson. Have a volunteer conduct warm-ups for the group. Use a metronome as a reference point for the conductor. Repeat this activity for all rehearsals during this study.
10. Once students master these large movements, add conducting while marching. Have students march and conduct a four pattern, emphasizing beat one. Repeat this exercise until students are comfortable with the movements.
11. Have students play quarter notes on any pitch while marching to the beat of the metronome. Emphasize beat one and try the march with a four pattern and a three pattern.
12. Conduct a post-test by repeating the pre-test. Record results on an audio recording device.
13. Assessments should be given on an individual basis. Students will perform a consistent steady beat with the metronome on, and then continue that beat with the metronome turned off.
14. Continue to have students state the definitions of sight-reading, steady beat, and metronome even if the lesson on steady beat is over. Continue to have students conduct the warm-ups for the group to a metronome. Periodically, test the students' ability to keep the steady beat.

Activity 2 – Rhythms

Purpose: Correct rhythmic interpretation is viewed by skilled sight-readers as important to sight-reading. The purpose of this activity is to increase rhythm-pattern recognition in middle school sight-readers by learning common rhythmic combinations by ear and by sight.

Materials Needed: Rhythm chart from Appendix C, metronome, chalkboard, rhythm excerpt in Appendix B, music stand, cardstock notes, tape.

Teacher Directions

1. Conduct a pre-test using the excerpt from Appendix B. Record the pre-test in audio format for later comparison to the post-test.
2. Ask the students to define steady beat in their own words. Give the definition of rhythm as divisions and patterns of the steady beat. Demonstrate rhythms from the rhythm chart in Appendix C using the syllables. Do this against a steady beat from the metronome. Have the students repeat the rhythms back to you. Once students are familiar with how the rhythmic combinations sound, show the rhythm chart to the students. Go through the rhythms again by following the chart (always against a steady beat from the metronome).
3. Use the music stand and the tape to create a visual representation of the steady beat (place parallel lines on the stand to represent the steady beat) and cardstock notes to create a visual representation of rhythms against a steady beat. Place the visual representations of notes (start with the first rhythm of the rhythm chart) below the first line on the stand. Continue this exercise until all rhythms from the chart are used.
4. Have students create combinations of the notes on the music stand and clap them out loud against a steady beat. Have the students play these rhythms, choosing any notes they

wish, against a steady beat from the metronome. Have some students conduct while the others clap the rhythms created.

5. Next, write the rhythms in standard notation on the chalkboard. Go through each line and say each rhythm while pointing out the rhythm combinations on the chalkboard. Continue this activity until the students understand the standard notation for each rhythm combination.
6. Have students create rhythmic combinations on the chalkboard for other students to clap and play. Have some students march and conduct the beat while others clap and play the rhythms created on the board.
7. Conduct a post-test to determine if the rhythm chart helped by having the students read the same line in the rhythm excerpt in Appendix B. Assessments may be done individually. Record the reading to compare with the pre-test.

Activity 3 – Eye Movement

Purpose: Skilled sight-readers "look ahead" while reading music. The purpose of this activity is to teach students to enhance eye movements in order to address the goal of improving sight-reading ability.

Materials Needed: Overhead projector, transparencies from Appendix D, marker; or Smart board, laptop computer, LCD projector, recording device.

Teacher Directions

1. Use the examples from Appendix D to project the image onto a Smart board or screen. Review the terms sight-reading, steady beat, metronome, and rhythm.

2. Pre-test students by having them play the first measure and continue playing the second measure after the overhead display is turned off. Record this pre-test using an audio recorder to compare to post-test.
3. Define eye movement for the students as it relates to sight-reading (to look ahead of where one is playing while reading a piece of music). Demonstrate how skilled sight-readers look ahead while playing by playing a recording of an excerpt of Appendix D and using a pointer against a display of the excerpt to show movement of the eyes while performing. Have some students come to the projection and move the pointer to the appropriate place while the recording is playing.
4. Practice "looking ahead" by pointing to the notes on the display two beats ahead of where the students are playing. Use the examples in Appendix D line (1b) for the display. Have the students follow the pointer with their eyes as they play the example on the display. Practice this way until students are comfortable with eye movement.
5. Determine if students are following correctly by turning off the display after they have played two beats and instructing the students to keep playing the next two beats. Continue this practice until the students can continue playing for two beats after the display is turn off.
6. Repeat the practice of "looking ahead" for four beats. Line (1c) will be used for this practice. Repeat the practice as detailed in step three. Continue until students can continue playing for four beats after the display is turned off.
7. The practice of "looking ahead" can be continued to include longer durations of beats; however, this study will only include four beats in 4/4 time.

8. Use line (1d) to assess the progress of the eye movement activity. This post-test should be recorded on an audio device for comparison to the pre-test.

Activity 4 – Melodic Ear-training

Purpose: Research has shown that effective sight-readers can identify melodic intervals by sight facilitating more effective sight-reading. This activity will build knowledge of simple melodic intervals to address the goal of enhancing sight-reading accuracy.

Materials Needed: Worksheets in Appendix F & G, keyboard instrument to demonstrate intervals, pencils, pre-test/post-test in Appendix E.

Teacher Directions

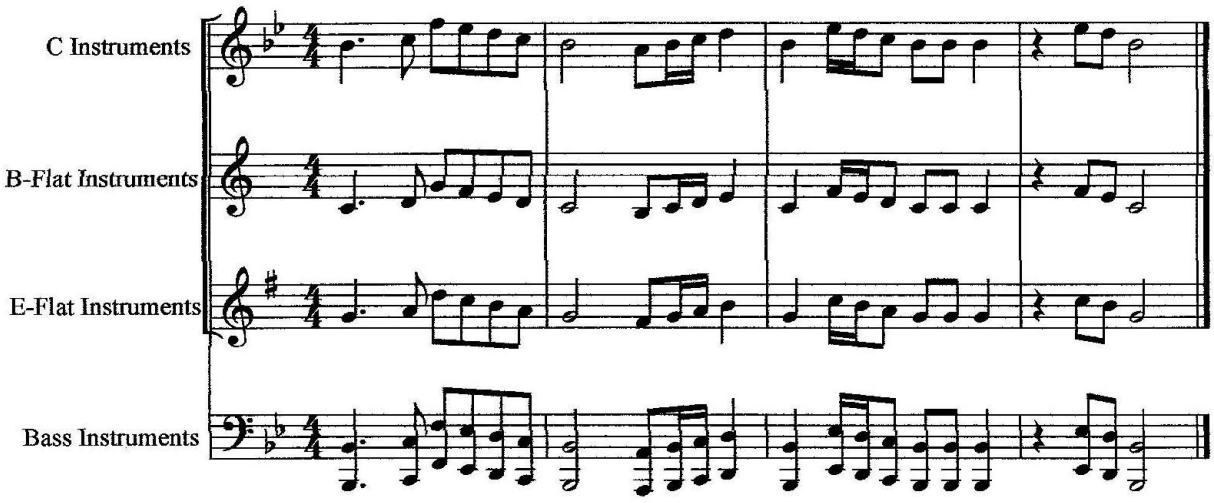
1. Conduct a pre-test using the worksheet provided in Appendix E. The worksheet will conclude if the students have any prior knowledge in the area of melodic intervals and the extent of that knowledge. Review the terms of sight-reading, rhythm, steady beat, metronome, and eye movement.
2. Define the word interval as the space between notes in music. Define the intervals of octave, fifth, third, and second. Demonstrate all of the intervals on a xylophone or other keyboard instrument. Have the students play an interval on the keyboard instrument to test their comprehension of the first part of the lesson.
3. Demonstrate to the students that intervals can be determined from the reading of music on the staff also by projecting the examples in Appendix F. Show the students how to count from one note to the other and come up with the same interval as they did on the keyboard instrument.

4. Use the worksheets in Appendix G to demonstrate the distance between intervals on the instruments. Have the students play through the lines and make sure they are playing correct notes so as to not learn the part incorrectly. Have students practice these lines many times over the course of many rehearsals (maybe using as a warm-up).
5. Teach the students the Kodaly hand symbols for the pitches of do, re, mi, and sol. Practice these hand signals along with the intervals. An example of the Kodaly hand signals is present in Appendix N. Play examples of the intervals from a recording while demonstrating the hand signals along with the students. After students show comprehension of the hand signals, have the students play the intervals while the teacher signals the pitches using Kodaly hand signals.
6. Teach the intervals by sight by projecting the image of Appendix F on a Smart board or screen. Have students practice writing the intervals in on music in their band folder.
7. Play through the worksheets from Appendix G again and ask students to identify melodic intervals out loud.
8. Conduct a post-test to determine if the melodic interval study was effective in teaching intervals by sight and sound. Use the pre-test in Appendix E.

Appendix B
RHYTHM PRE-TEST/POST-TEST

By: Danielle Sabol

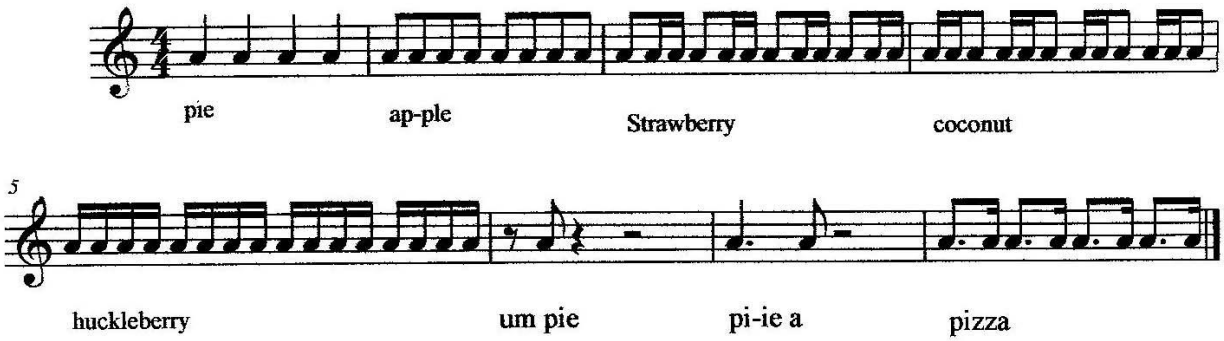
Rhythmic Pre-test/Post-test



Appendix C
RHTHMIC CHART WITH SYLLABLES

By: Danielle Sabol

Rhythm Chart

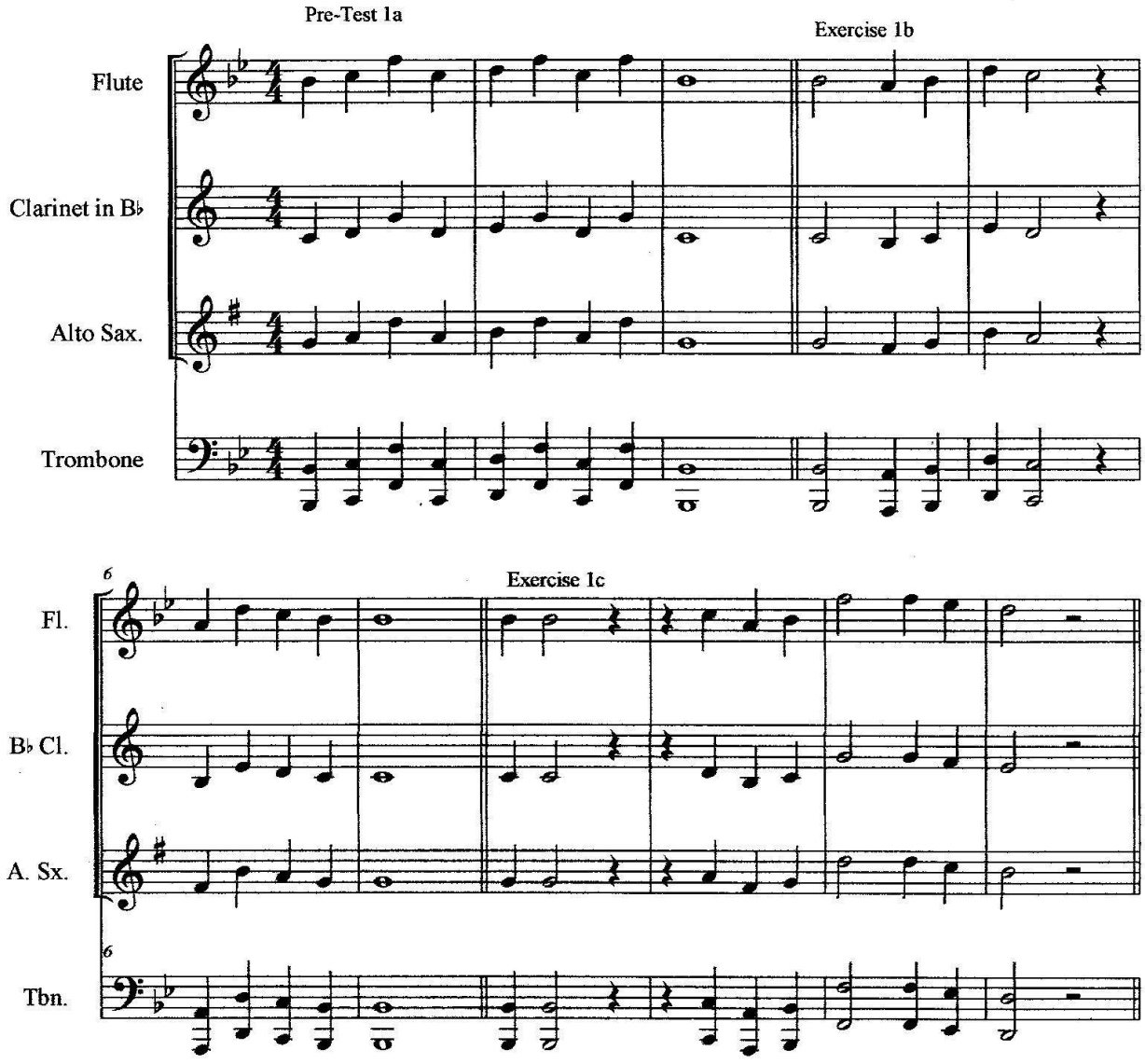


Appendix D
EYE MOVEMENT EXERCISES

By: Danielle Sabol

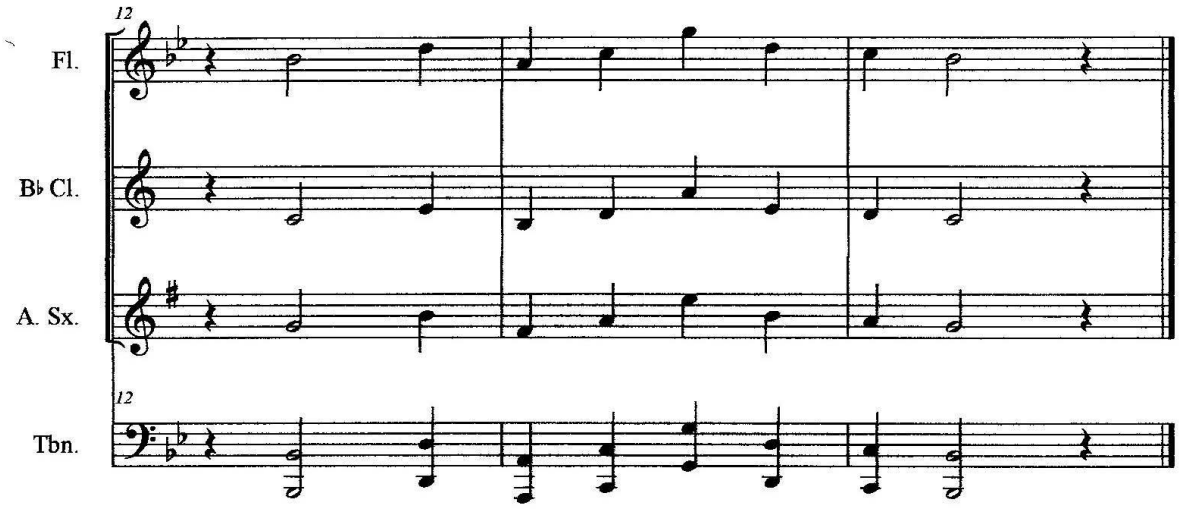
Eye Movement Activity

Score



Eye Movement Activity

2

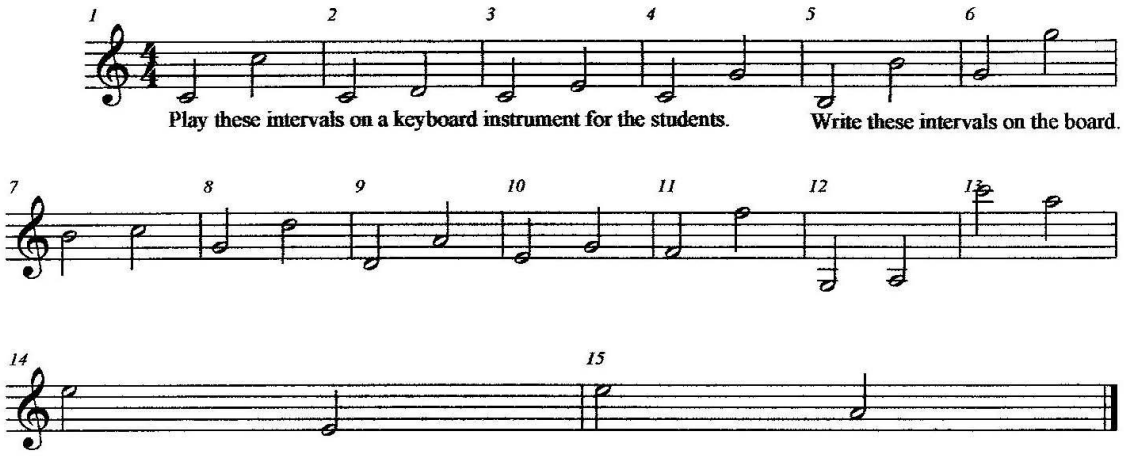


Appendix E
MELODIC INTERVALS PRE-TEST/POST-TEST

By: Danielle Sabol

Melodic Interval - pre-test/post-test

Score

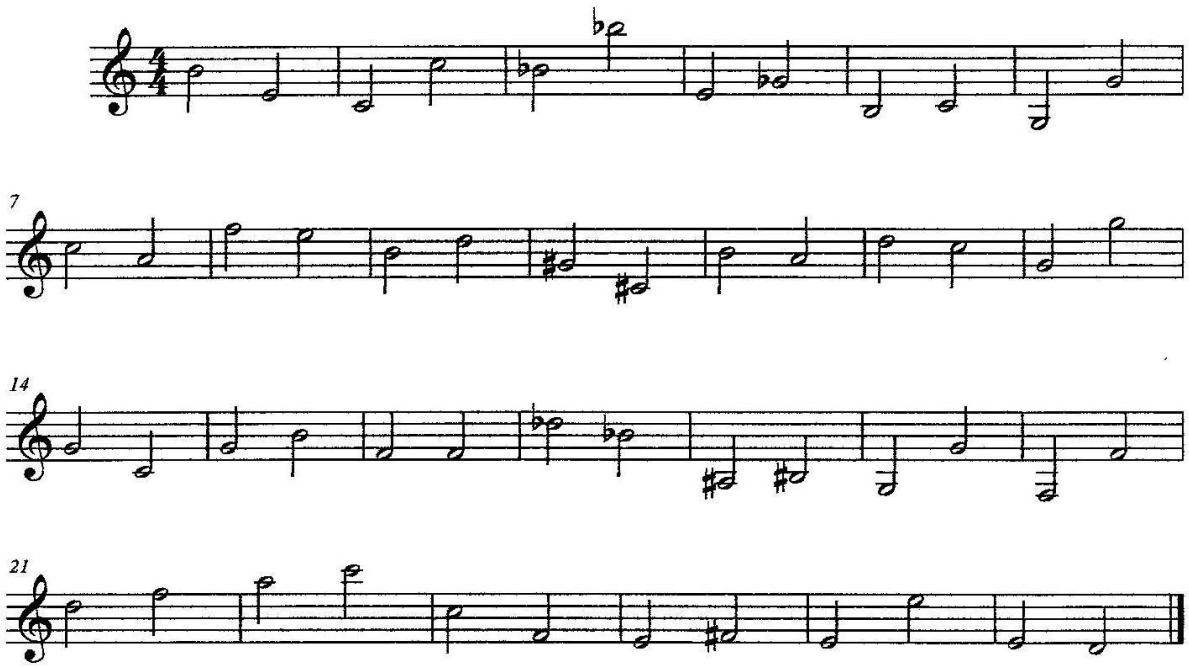


Appendix F
MELODIC INTERVALS

By: Danielle Sabol

Melodic Interval Worksheet

Score

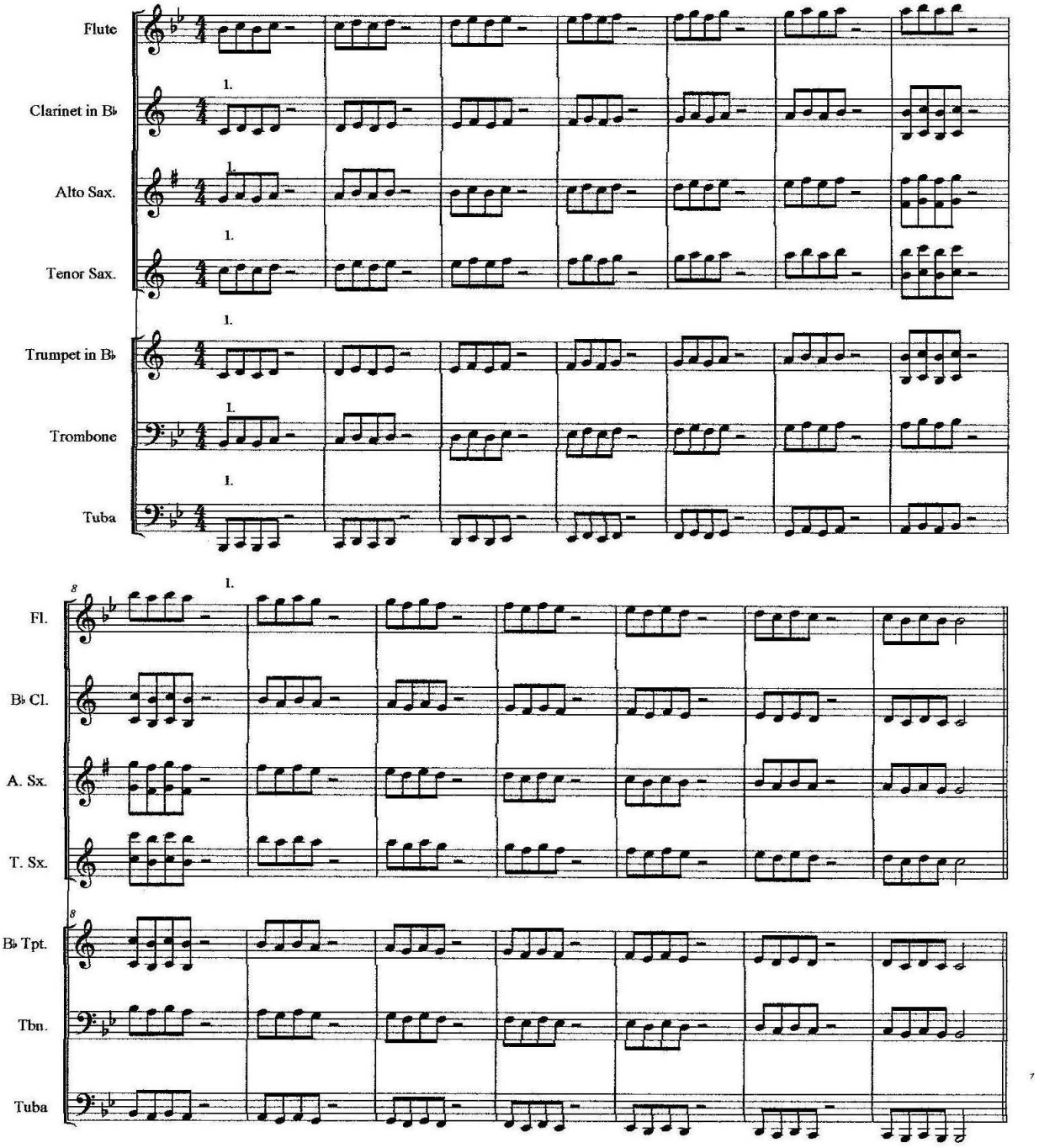


Appendix G
SCALE EXERCISES

By: Danielle Sabol

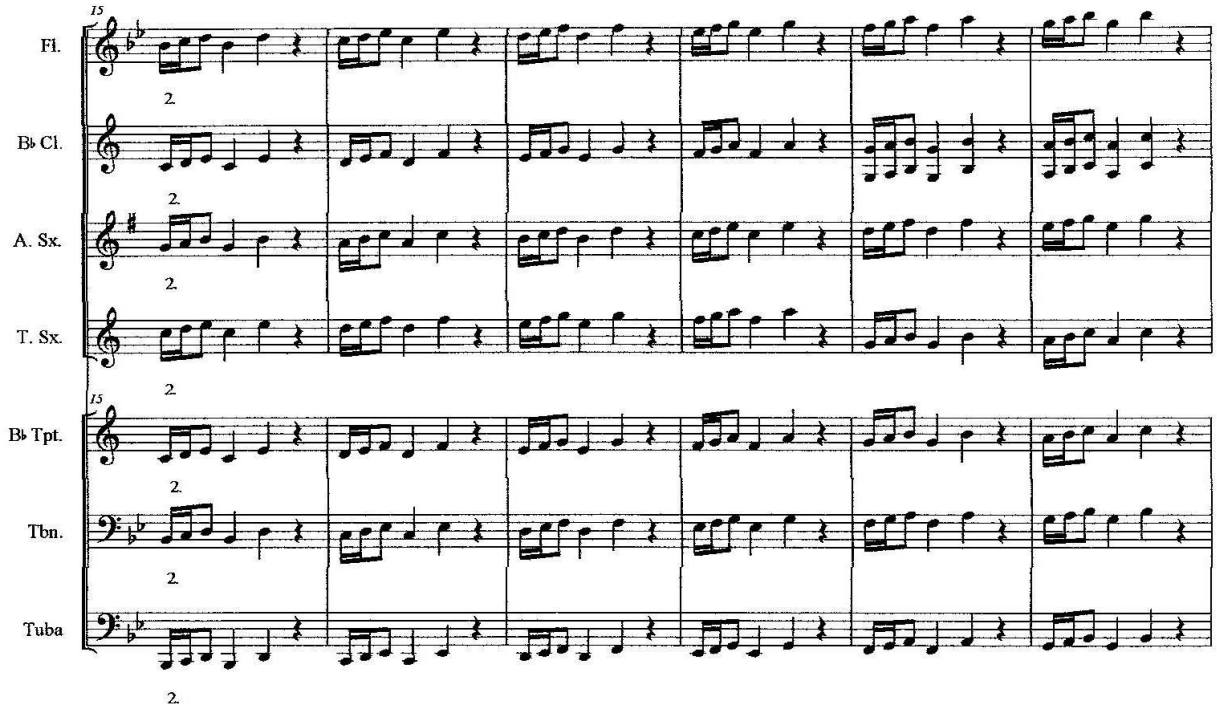
Scale Exercises in B-Flat

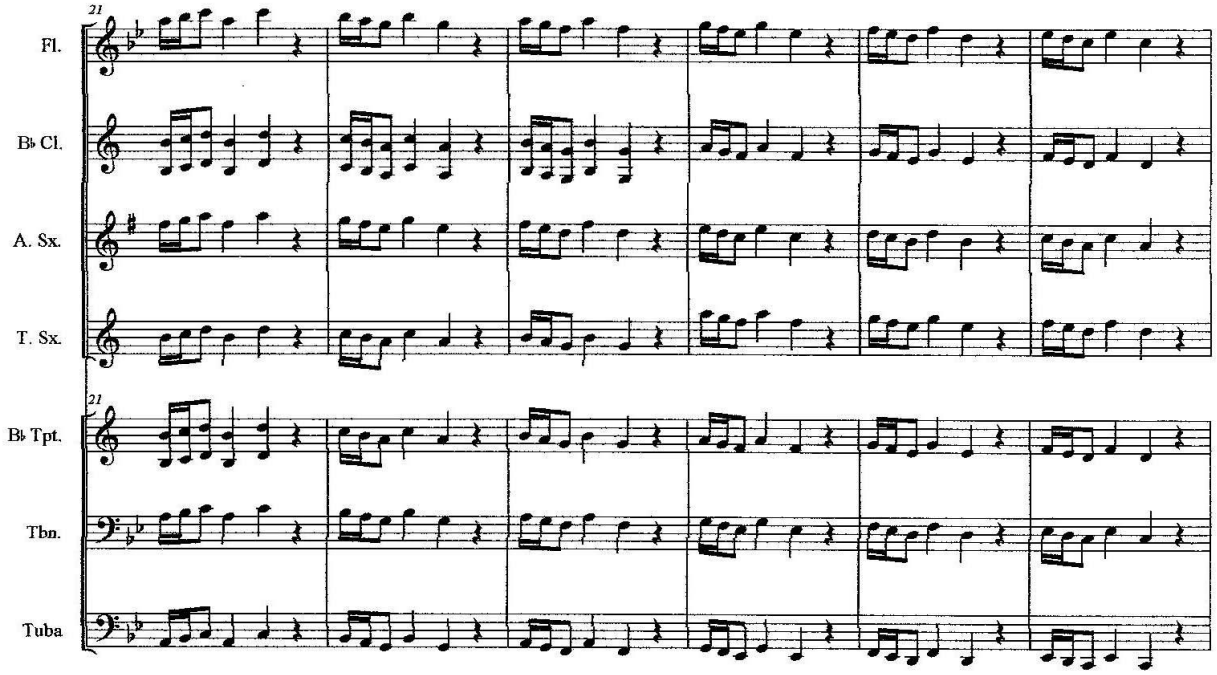
Score

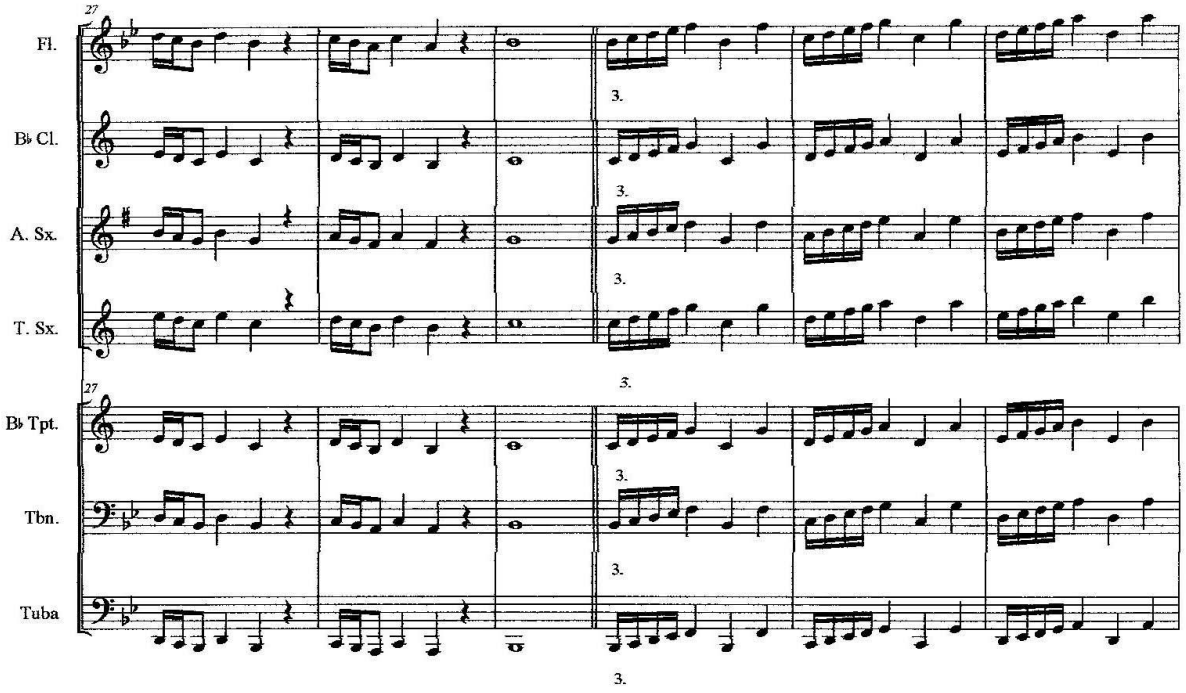


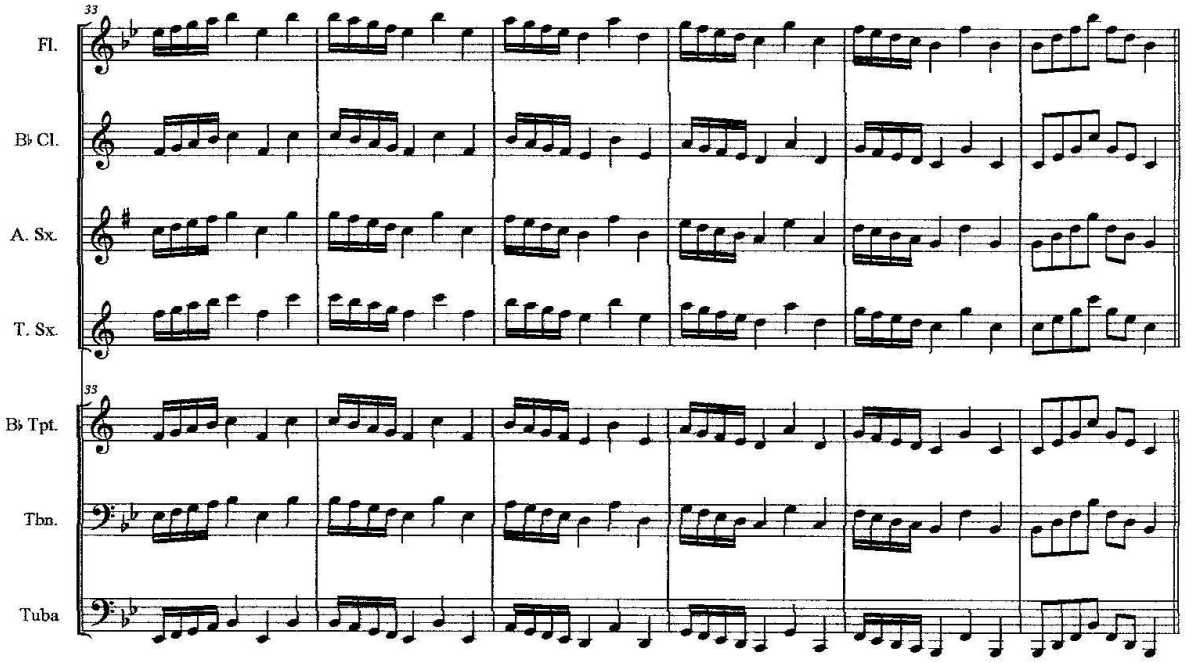
Scale Exercises

2

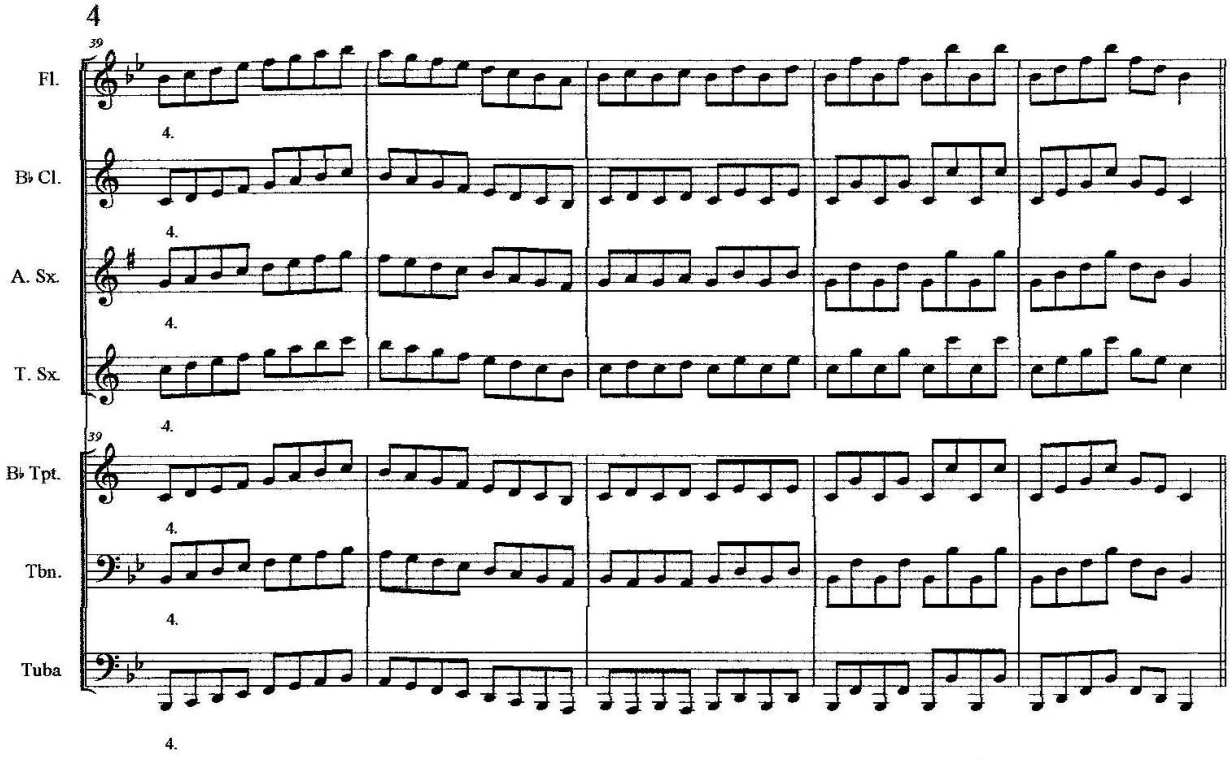





27
Fl.
B♭ Cl.
A. Sx.
T. Sx.
B♭ Tpt.
Tbn.
Tuba
3.

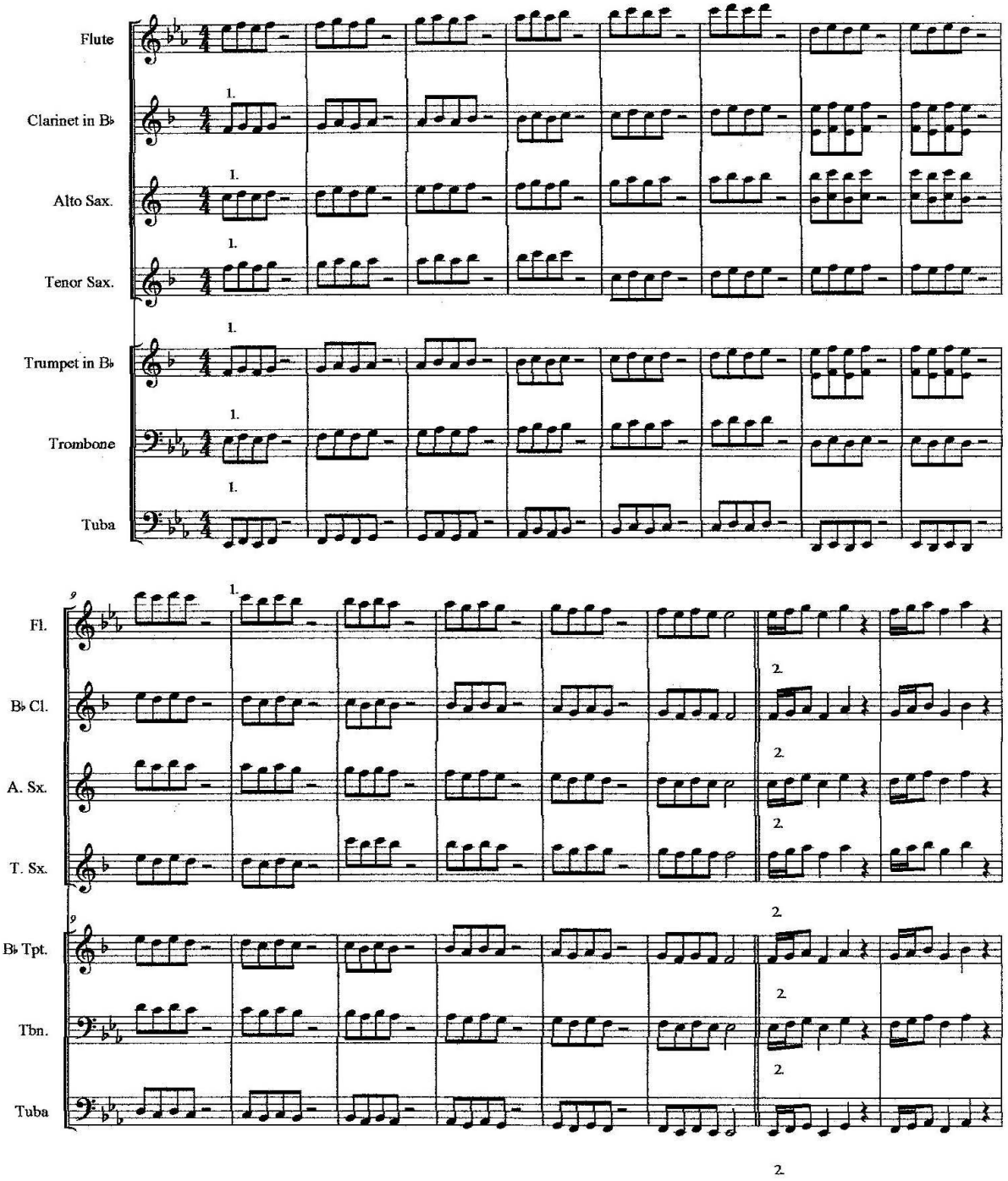

33
35
Fl.
B♭ Cl.
A. Sx.
T. Sx.
B♭ Tpt.
Tbn.
Tuba

Scale Exercises



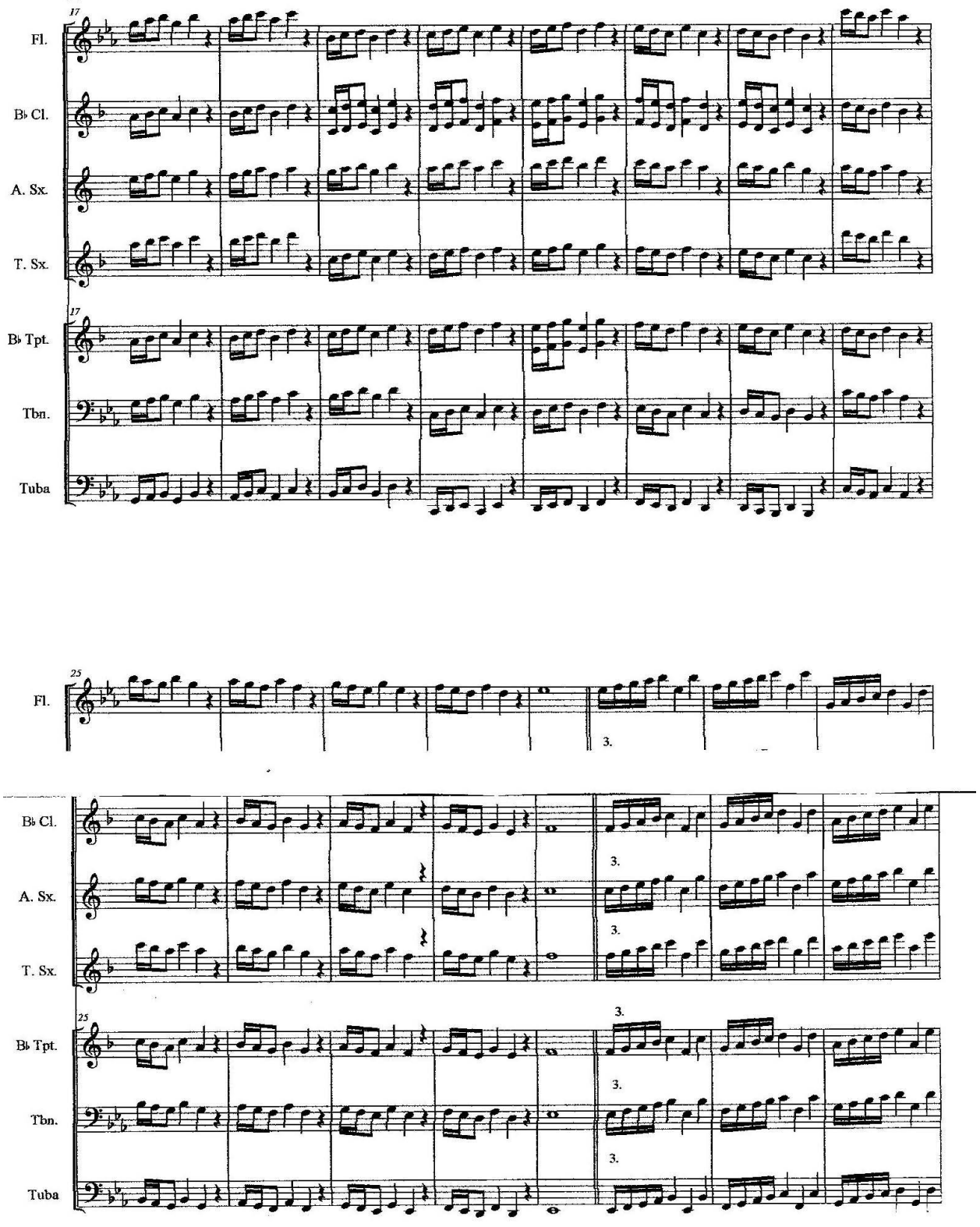
Scale Exercises in E-Flat

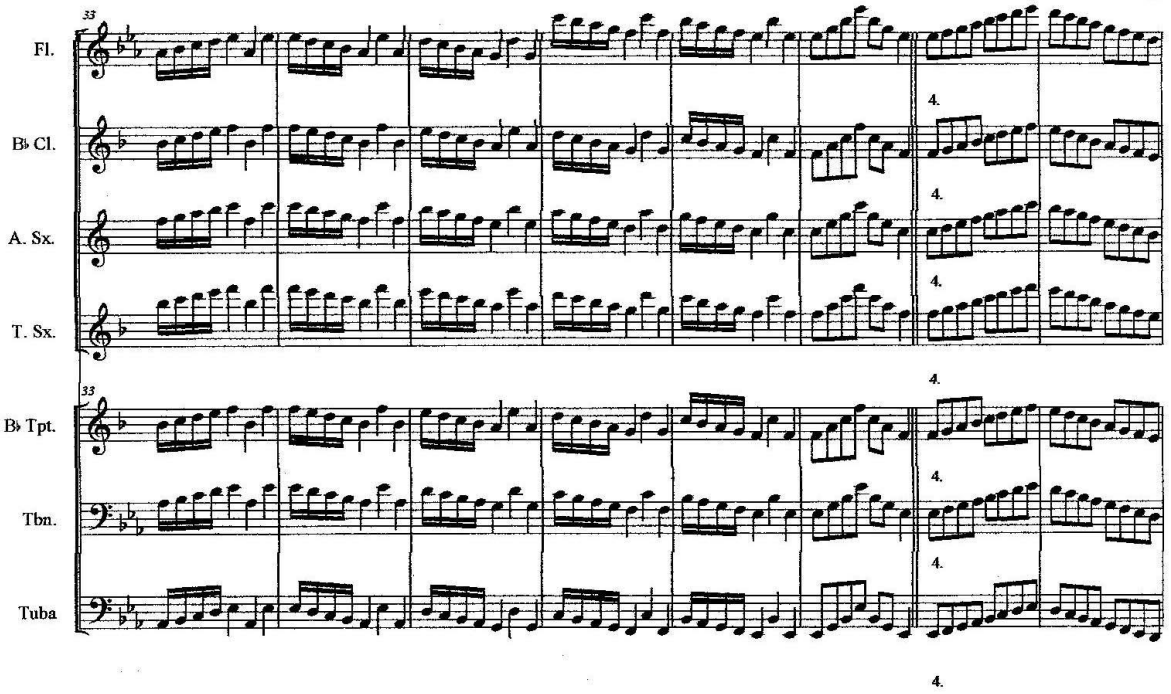
Score

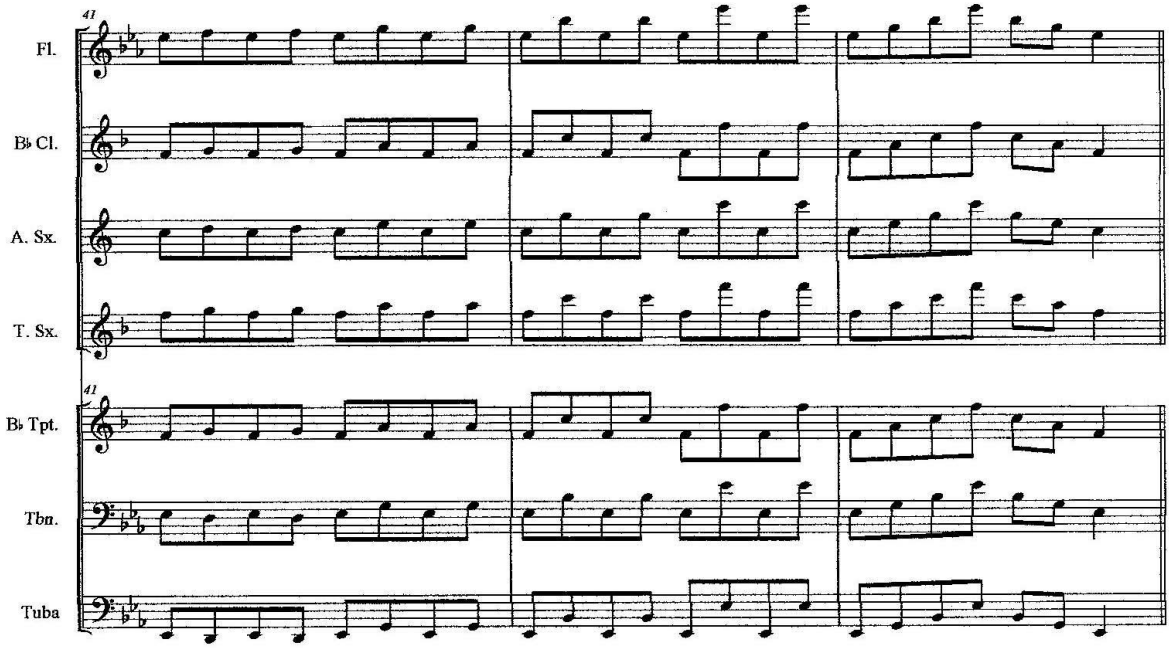


Scale Exercises

2

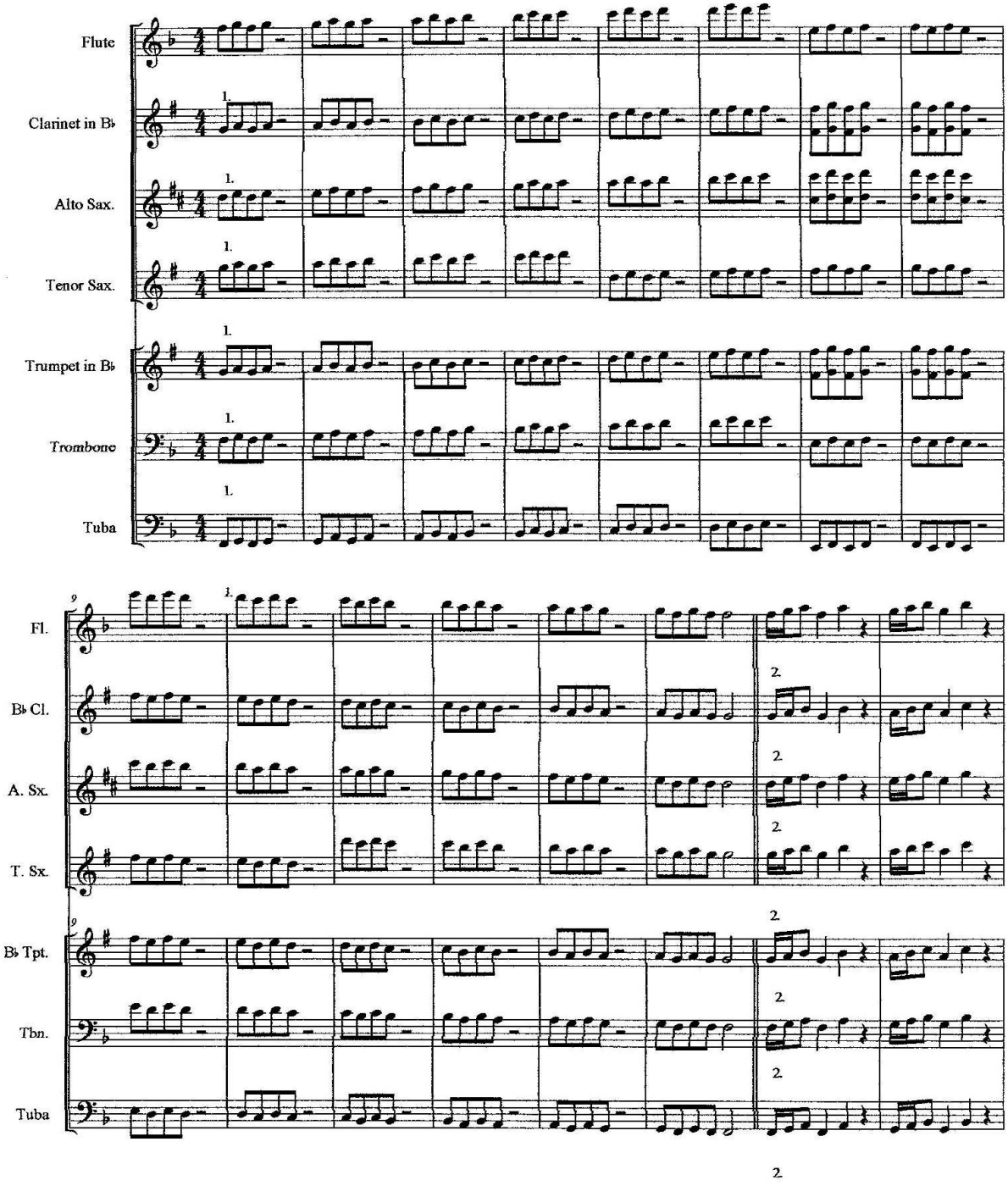


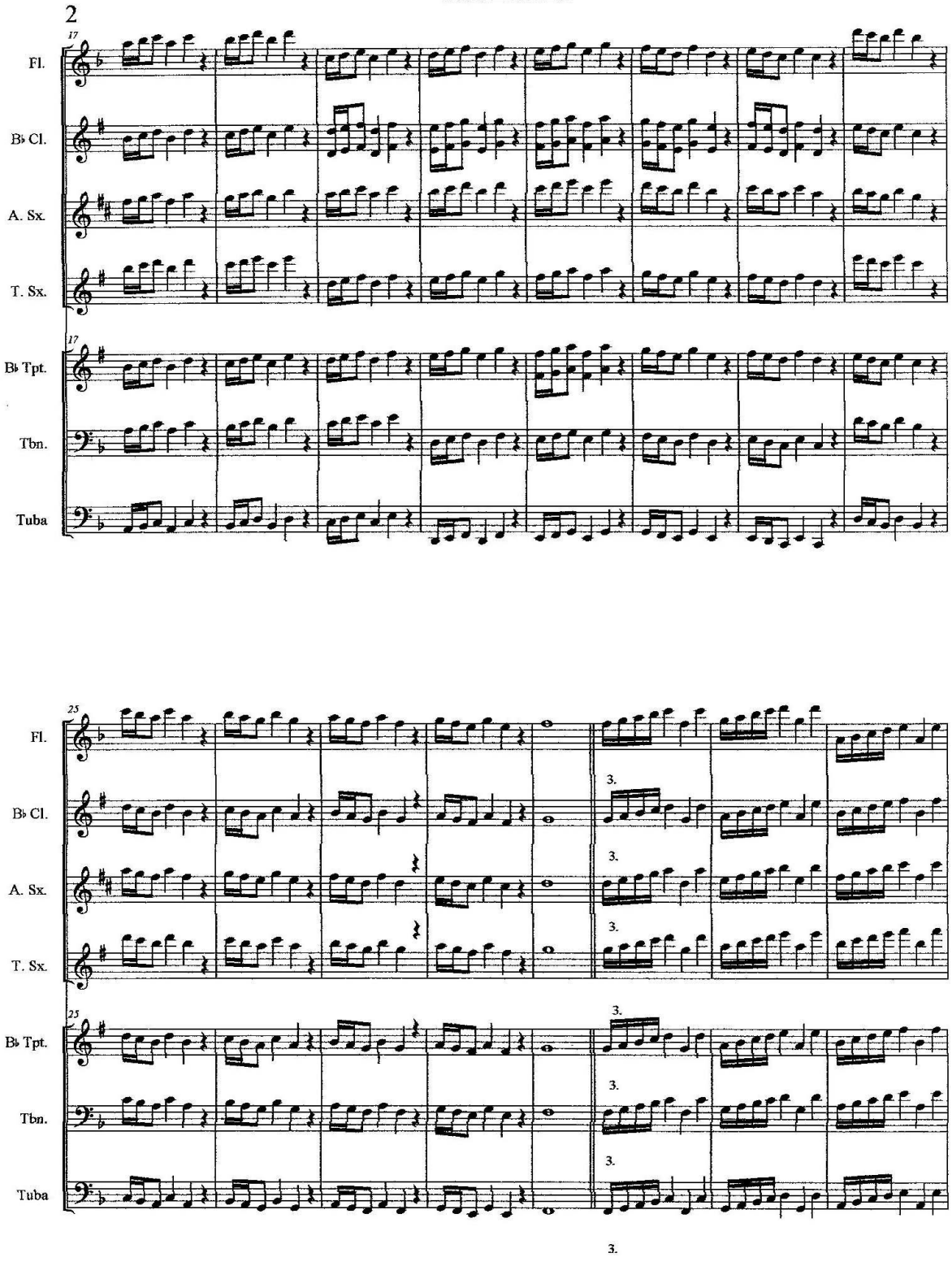

33
Fl.
B♭ Cl.
A. Sx.
T. Sx.
B♭ Tpt.
Tbn.
Tuba
4.

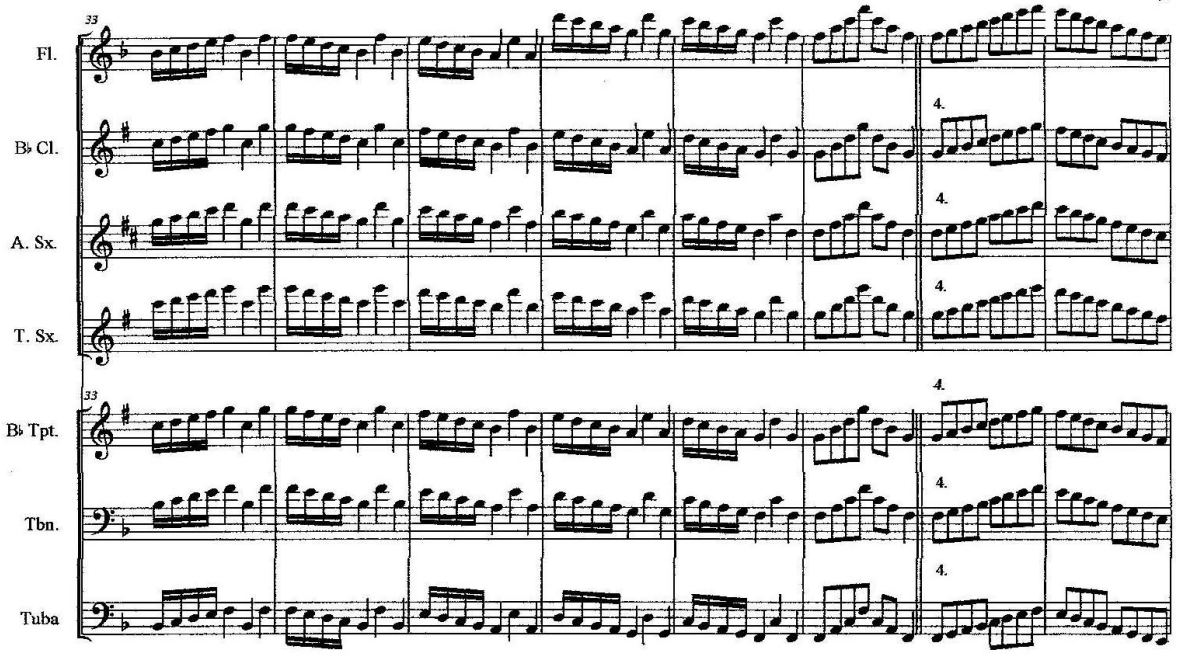

41
Fl.
B♭ Cl.
A. Sx.
T. Sx.
B♭ Tpt.
Tbn.
Tuba

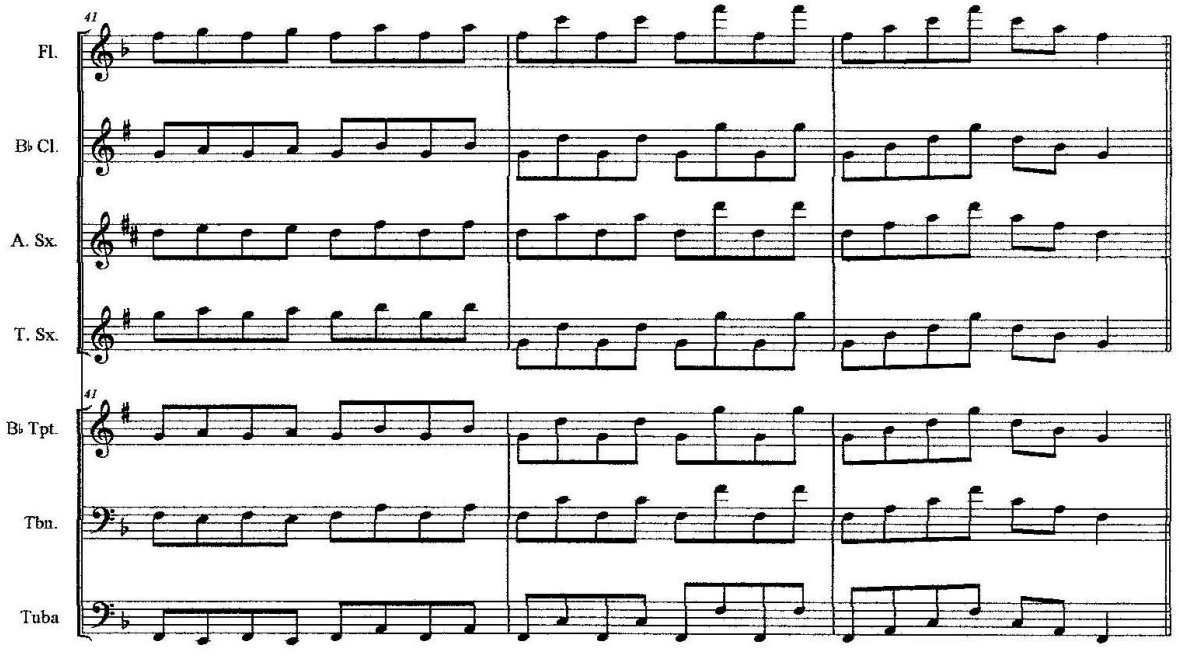
Scale Exercises in F

Score



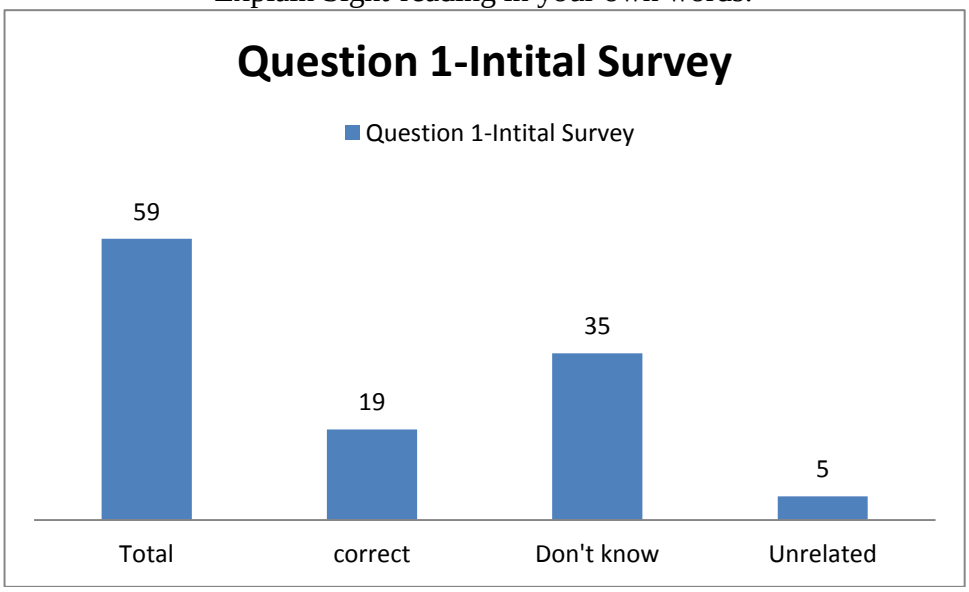

2
17
Fl.
B♭ Cl.
A. Sx.
T. Sx.
17
B♭ Tpt.
Tbn.
Tuba
25
Fl.
B♭ Cl.
A. Sx.
T. Sx.
25
B♭ Tpt.
Tbn.
Tuba
3.
3.
3.
3.
3.
3.
3.
3.


33
Fl.
B♭ Cl.
A. Sx.
T. Sx.
33
B♭ Tpt.
Tbn.
Tuba
4.

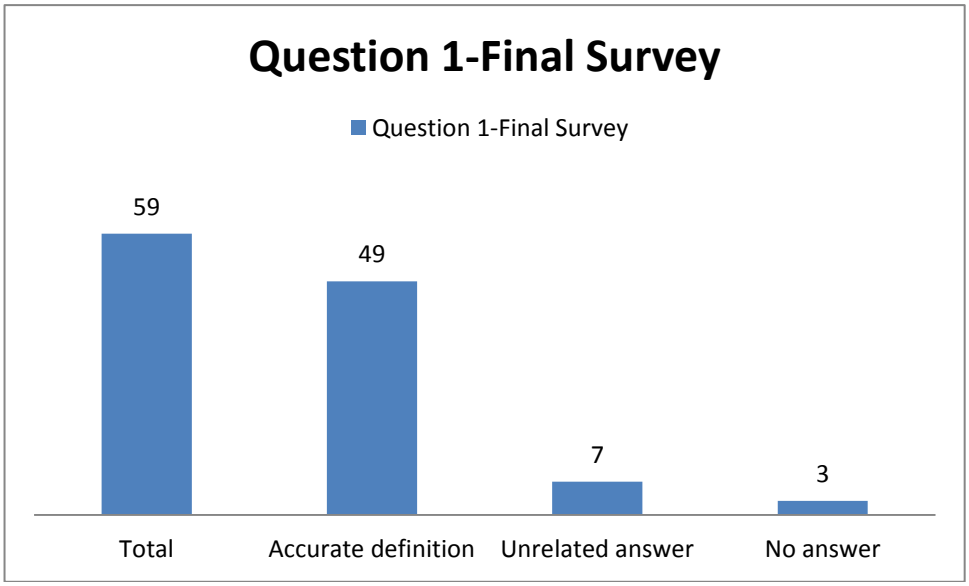

41
Fl.
B♭ Cl.
A. Sx.
T. Sx.
41
B♭ Tpt.
Tbn.
Tuba

Appendix H
CHARTS AND GRAPHS OF RESULTS

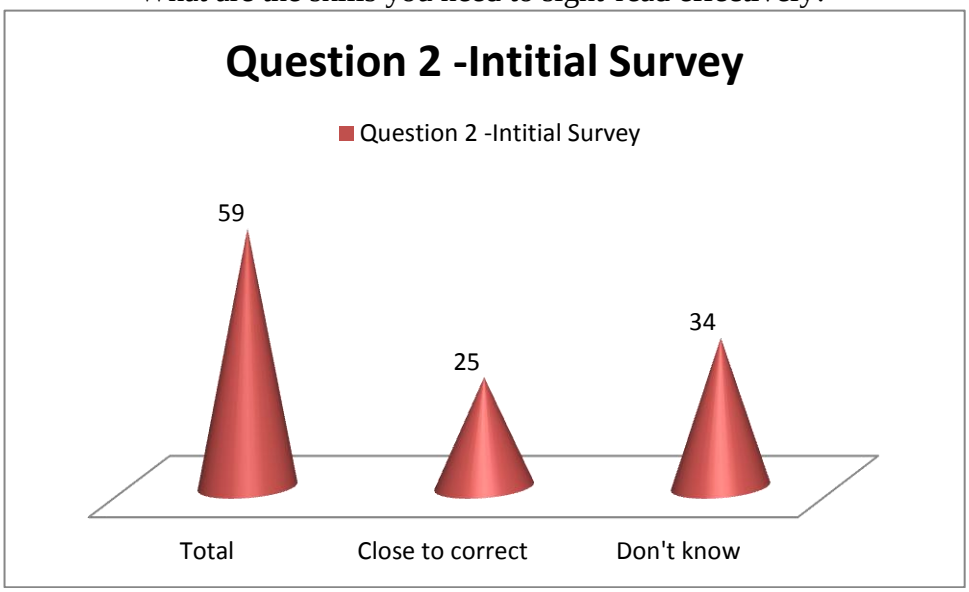
Explain Sight-reading in your own words.



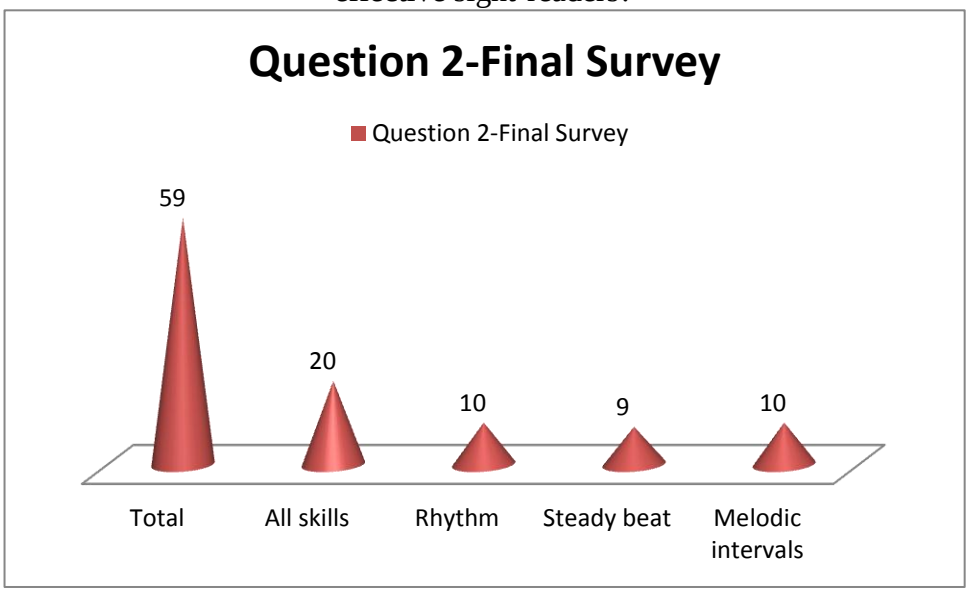
Now that you have completed the sight-reading module, explain sight-reading in your own words.



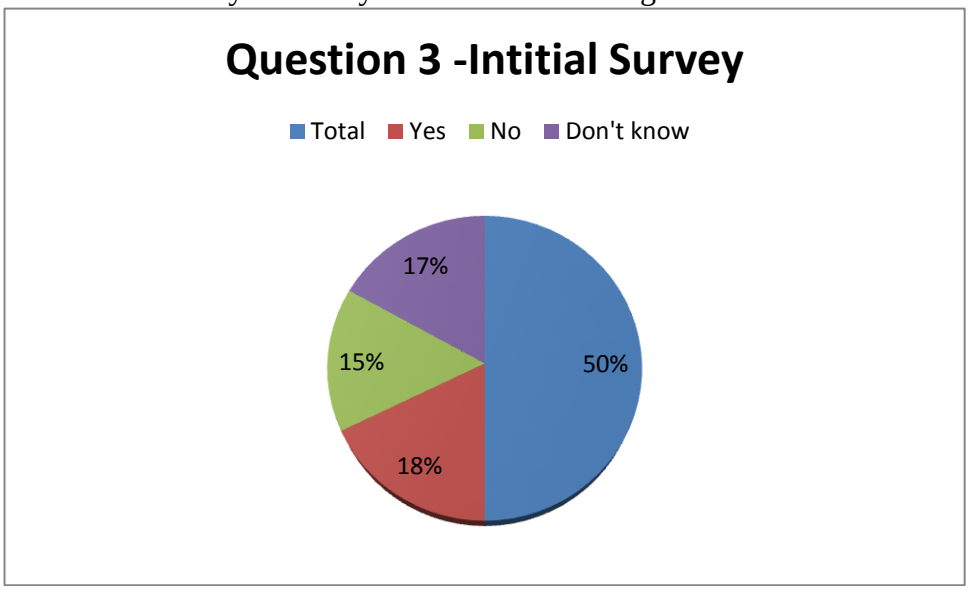
What are the skills you need to sight-read effectively?



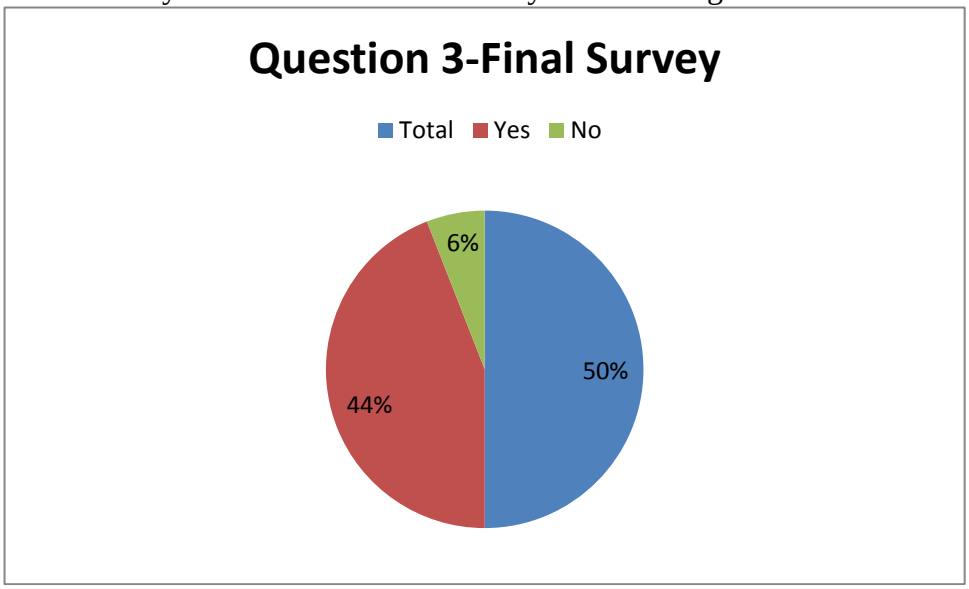
Which skills that were developed by this study do you think had the best impact on creating effective sight-readers?



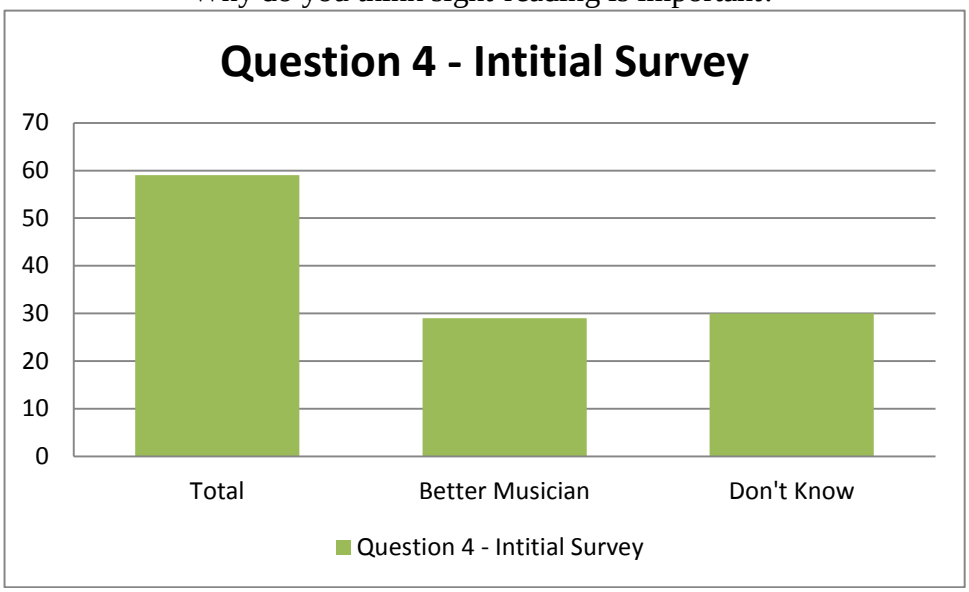
Do you think you are an effective sight-reader?



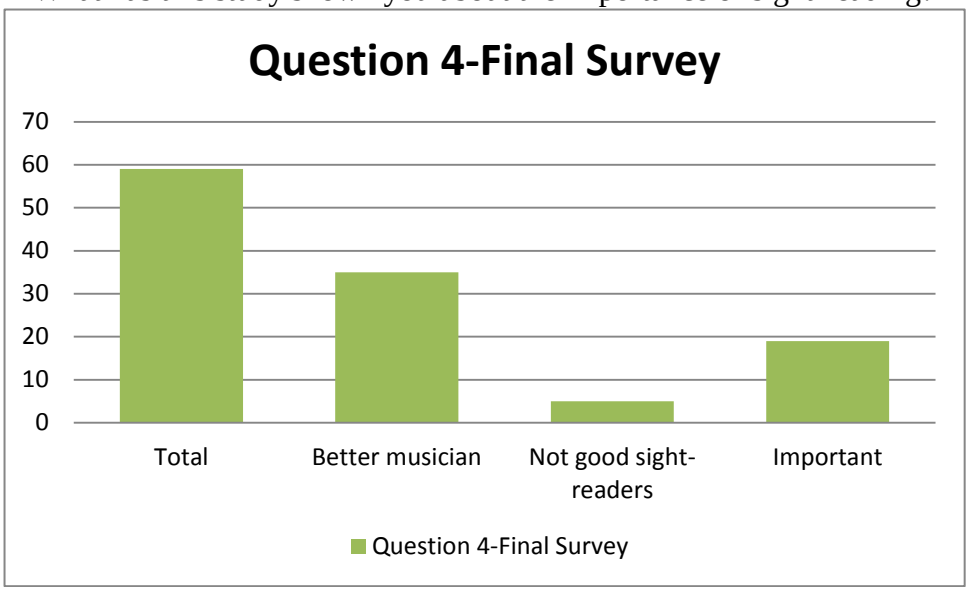
Do you think this module made you a better sight-reader?



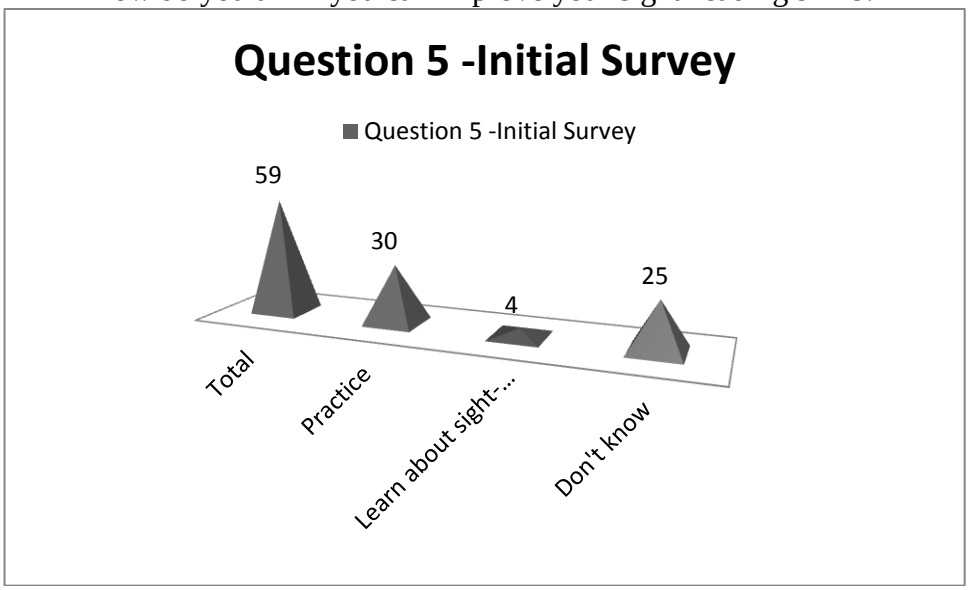
Why do you think sight-reading is important?



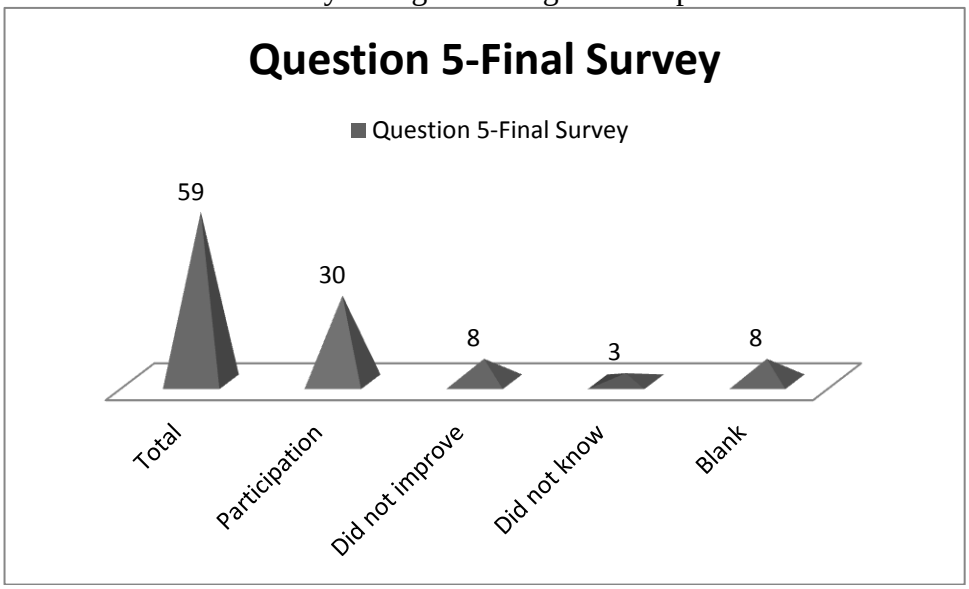
What has this study shown you about the importance of sight-reading?

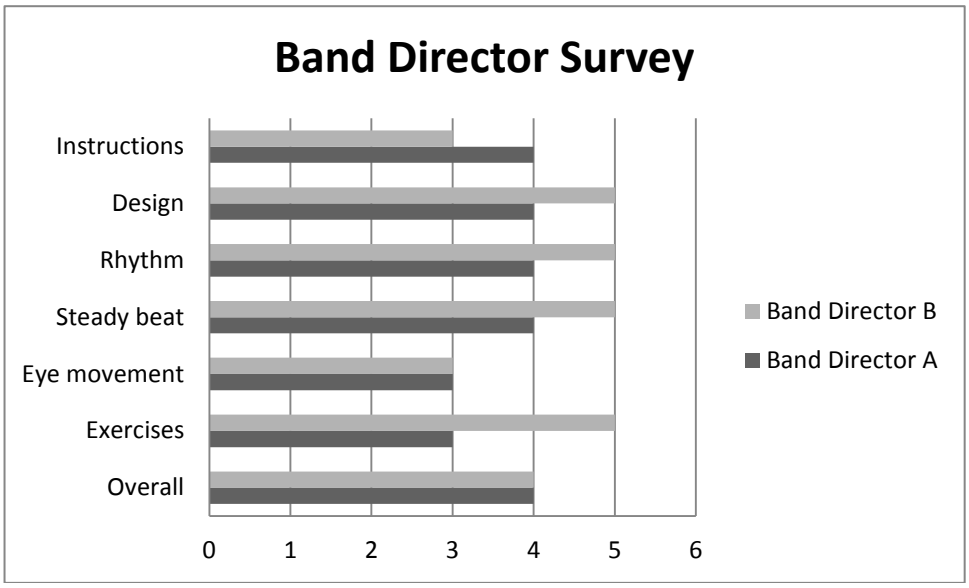


How do you think you can improve your sight-reading skills?



How did your sight-reading skills improve?



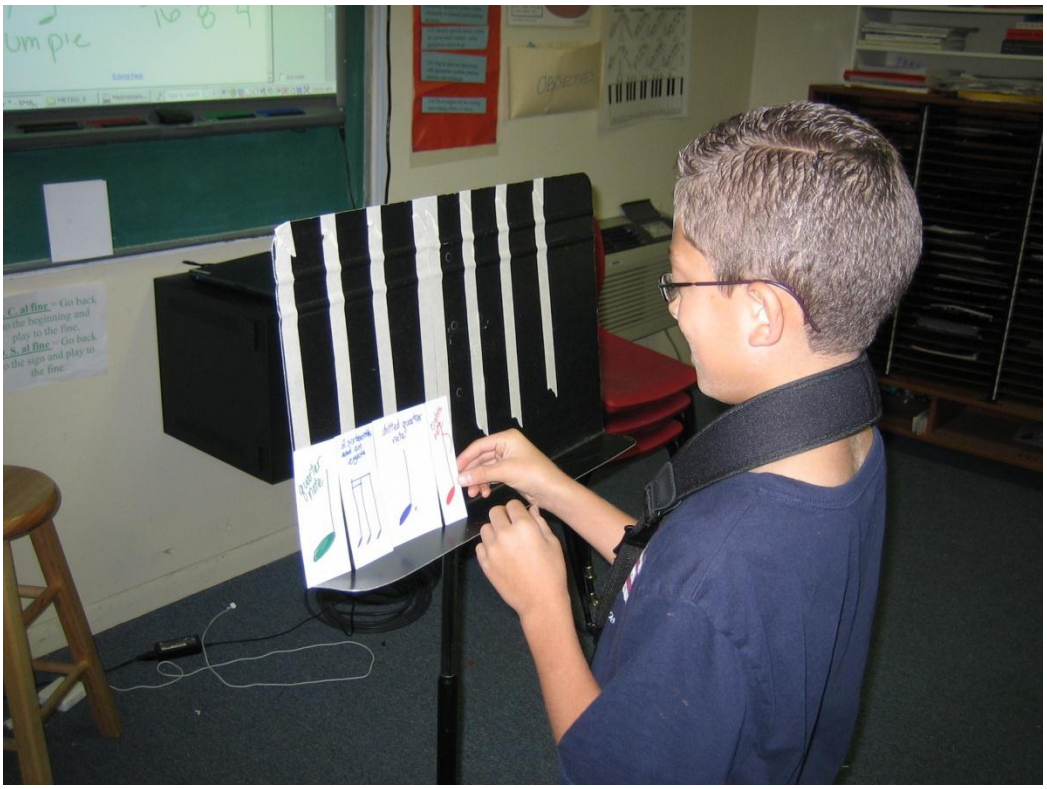


This chart shows the results of the band director survey.

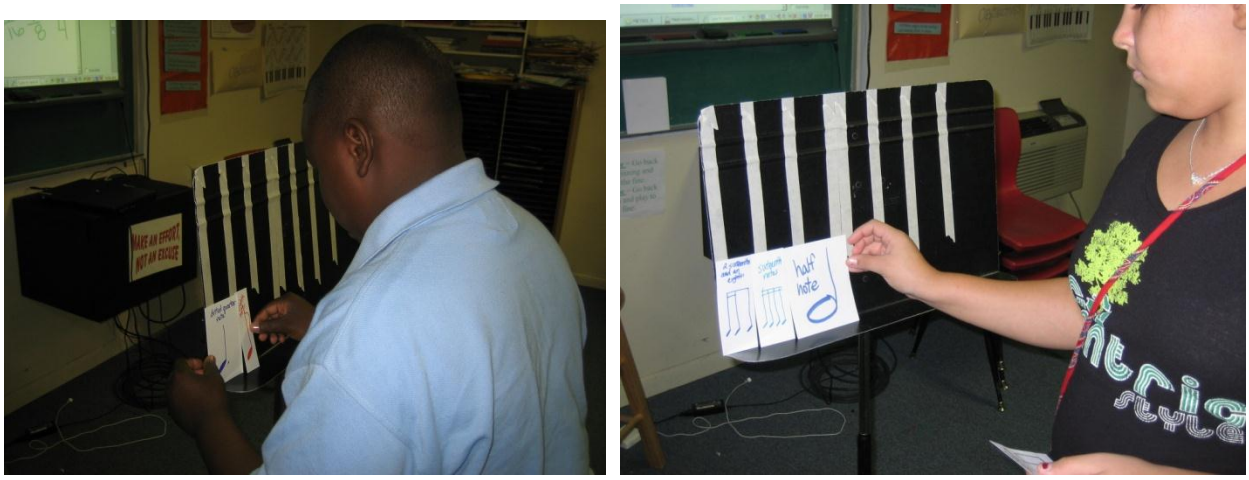
Appendix I
PICTURES OF ACTIVITIES
(all pictures were used with written permission)

Students conducting—demonstrating a steady beat.

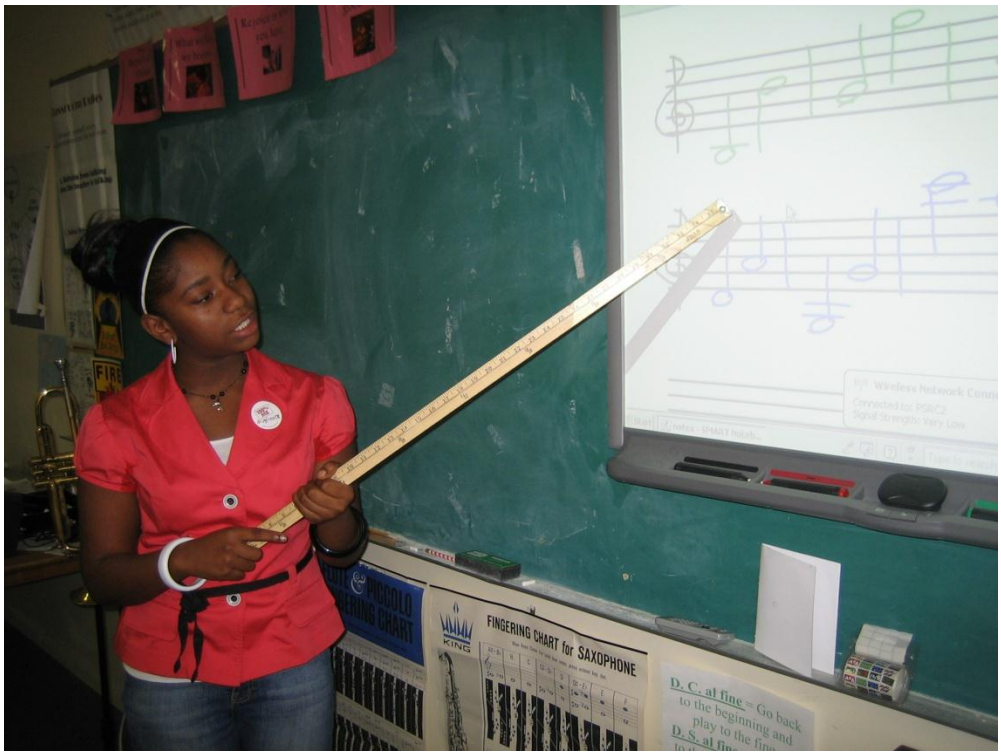
Demonstrating a steady beat (the metronome can be seen in the background).



Students create their own rhythms using the rhythm cards.



Students play the rhythm game.



This student shows the class where their eyes should be while reading music.

Students demonstrate eye movement as it relates to music reading.

Students demonstrate how to play intervals on the xylophone.

These students show the class the distance between notes using the xylophone.

Appendix J
SURVEYS

Survey for Students – Initial

Please answer all questions to the best of your knowledge. If you do not know an answer, leave it blank. This is not a graded assignment.

ID # _____

1. Explain sight-reading in your own words.

_____

_____

_____

_____

2. What are the skills you need to sight-read effectively?

_____

_____

_____

_____

3. Do you think you are an effective sight-reader? Explain.

_____

_____

4. Why do you think sight-reading is important?

_____

_____

_____

5. How do you think you can improve your sight-reading skills?

_____

_____

Survey for Students – Final

Please answer all questions to the best of your knowledge. If you do not know an answer, leave it blank. This is not a graded assignment.
ID # _____

1. Now that you have completed the sight-reading module, explain sight-reading in your own words.

_____

_____

_____

_____

_____

2. Which skills that were developed by this study do you think had the best impact on creating effective sight-readers?

_____

_____

_____

_____

3. Do you think this sight-reading module made you a better sight-reader? Explain.

_____

_____

4. What has this study shown you about the importance of sight-reading?

_____

_____

5. How do you think your sight-reading skills improved?

_____

_____

Survey for Middle School Band Directors

After you have reviewed the sight-reading module, please take the time to complete this survey. Your answers and opinions may be used in the final draft of this thesis; however, your name and your school's name will be omitted for confidentiality.

For the following responses please use 0=not effective and 5=very effective. Please circle the number.

1. The overall effectiveness of the sight-reading module.

0 1 2 3 4 5

2. The overall effectiveness of the exercises.

0 1 2 3 4 5

3. The effectiveness of the eye movement exercises.

0 1 2 3 4 5

4. The effectiveness of the steady beat exercises.

0 1 2 3 4 5

5. The effectiveness of the syllabic rhythm exercises.

0 1 2 3 4 5

6. The effectiveness of the melodic ear training exercises.

0 1 2 3 4 5

7. The effectiveness of the presentation of the material (overall design of the module).

0 1 2 3 4 5

8. The effectiveness of the instructions included in the lesson plans.

0 1 2 3 4 5

Appendix K
ALTERED NOTE NAMES

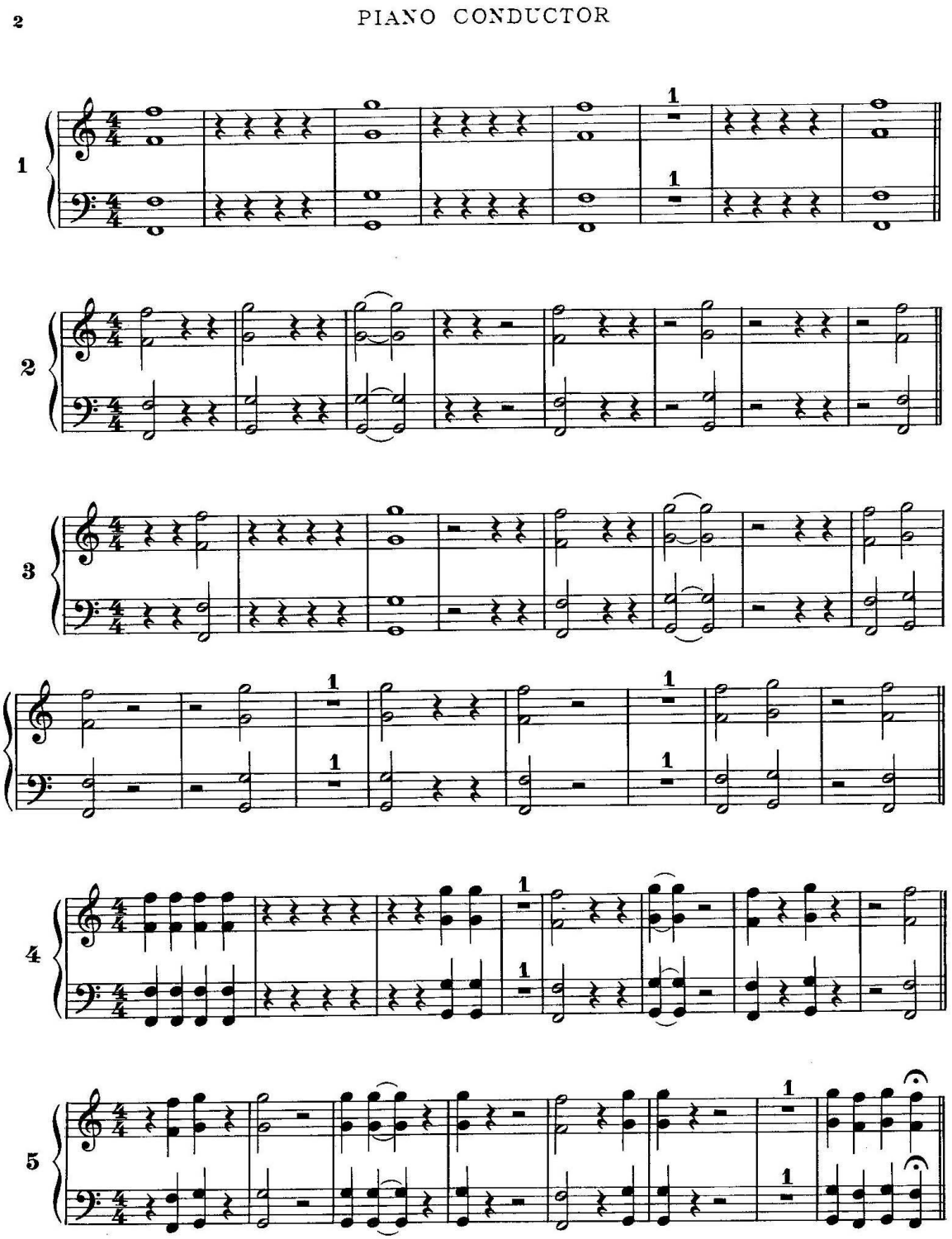
Note names altered by one sharp:

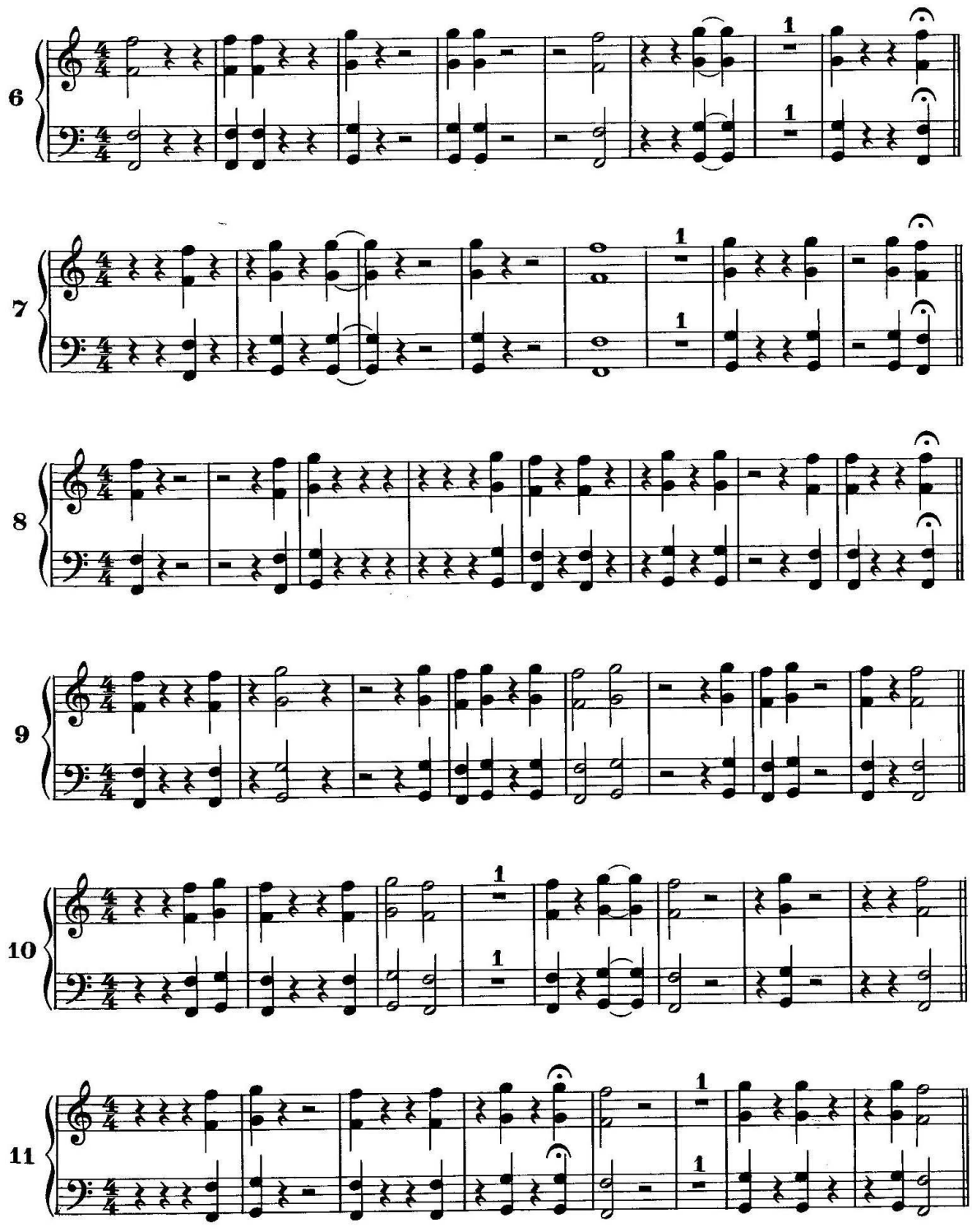
Note	Pronunciation
F-Sharp = lease	feast (without the letter “t”)
C-Sharp = cease	ceese
G-Sharp = gease	geese
D-Sharp = dease	dease
A-Sharp = ace	ace
E-Sharp = eas	eas (as in eastern)
B-Sharp = beas	beast (without the letter “t”)

Note names altered by one flat:

Note	Pronunciation
B-Flat = bes	best (without the letter “t”)
E-Flat = es	es (as in escalator)
A-Flat = ice	ice
D-Flat = des	desk (without the letter “k”)
G-Flat = guess	guess
C-Flat = cess	cess
F-Flat = fes	fes (as in festival)

Appendix L
EXAMPLES OF PAGES FROM *101 RHYTHMIC REST PATTERNS*

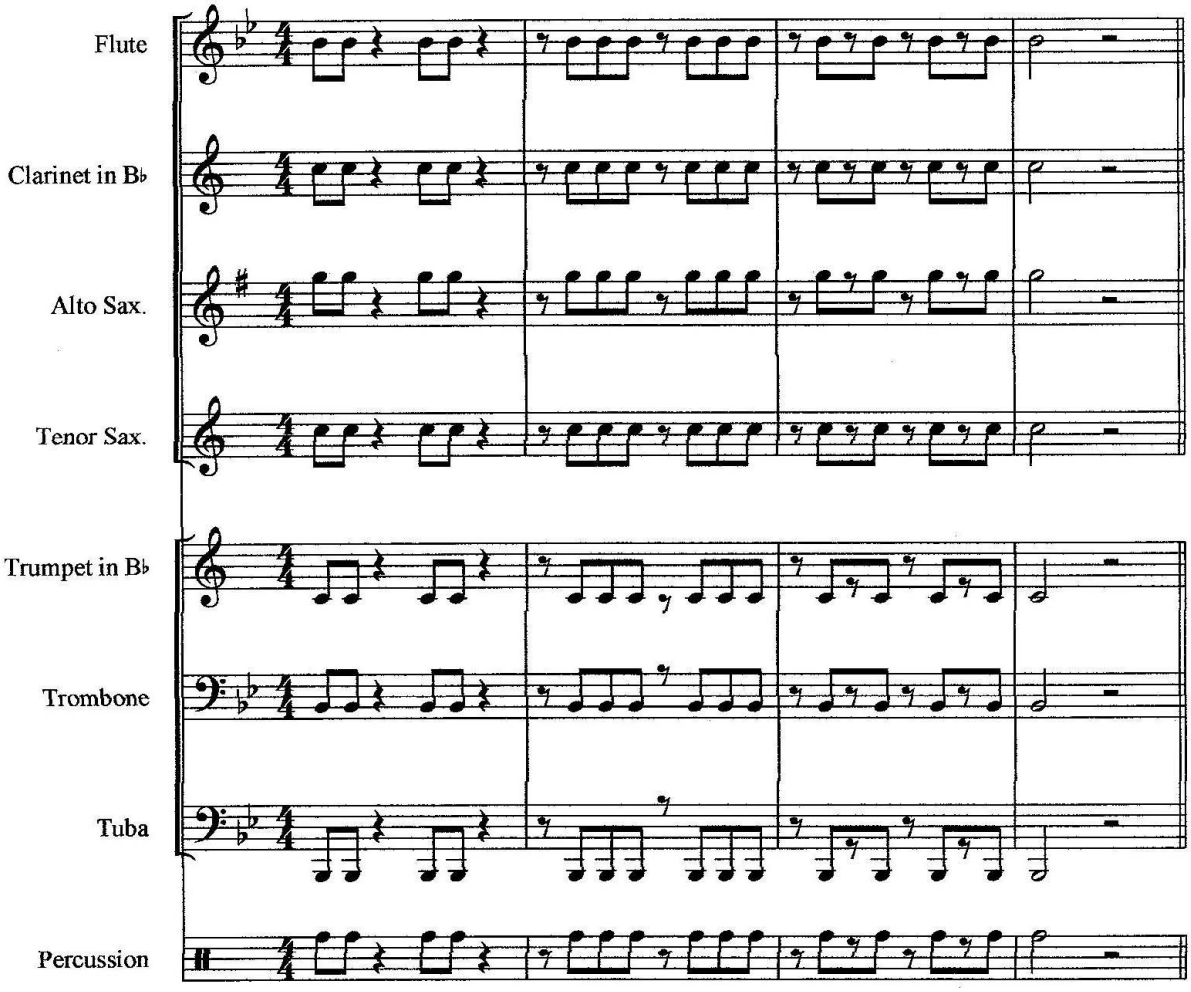



6
7
8
9
10
11

Appendix M
MORE RHYTHMIC EXERCISES

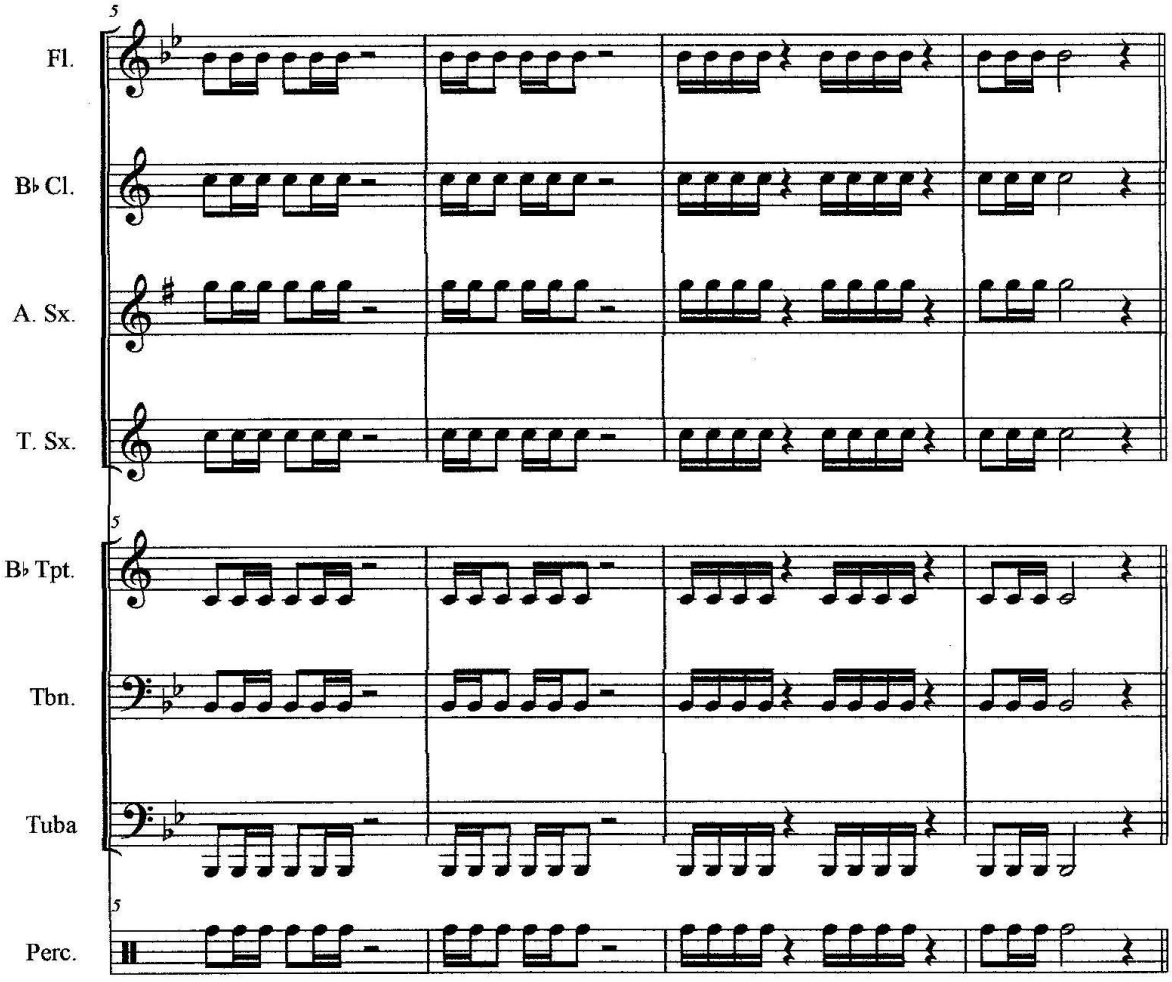
Rhythm Practice

Danielle Sabol

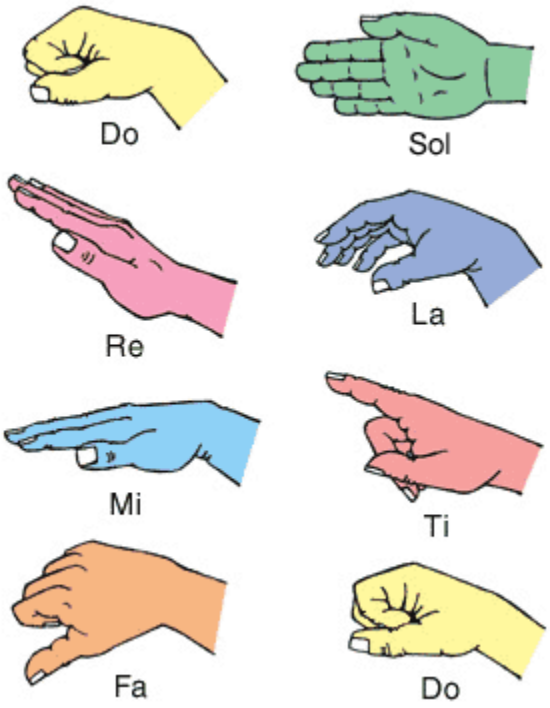


Rhythm Practice

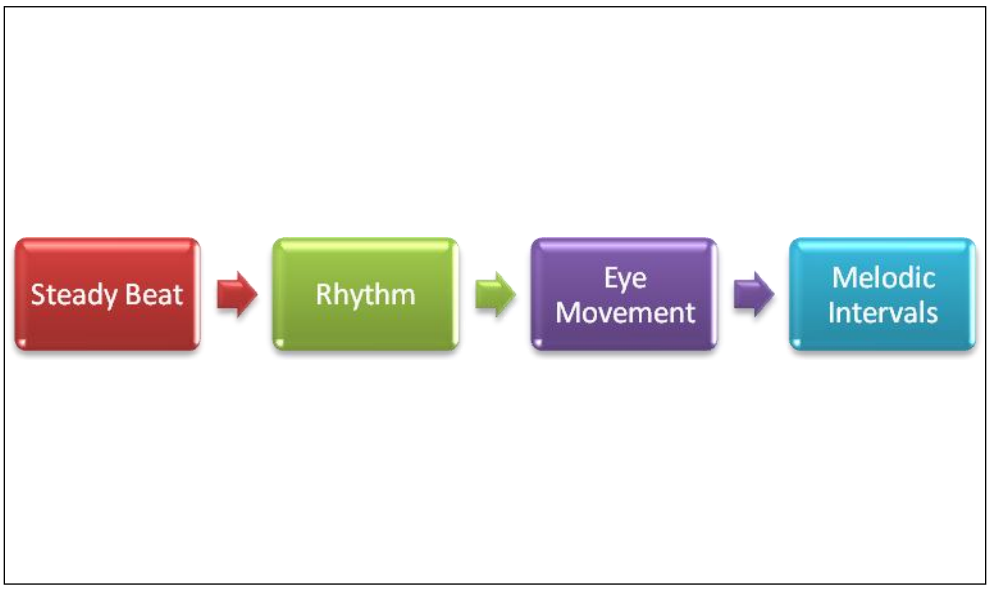
2



Appendix N
KODALY HAND SIGNALS



Appendix O
SIGHT-READING FLOW MAP



This chart was created by a student on his own time to prepresent the flow of skills studied in this action research project.

Appendix P
LIST OF EDUCATIONAL RESOURCES

Title	Author	Publisher	Price
101 Rhythmic Rest Patterns	Grover C. Yaus	Belwin Mills Publishing	$13.95/conductor $6.95/parts
Band Technique Step-by-Step	Robert Elledge & Donald Haddad	Neil A Kjos Music Co.	$19.95/score $4.95/parts
Improve Your Sight-reading!	Paul Harris	Alfred Publishing	$7.95/parts
Sight-reading Studies	James Curnow	Curnow Music	$69.00/score and parts
Sight-reading for Band, Book 2	Norman Nelson	Southern Music Company	$3.50/parts
Sight-reading Builders	James Curnow	Curnow Music	$15.95/ score and parts
Sight-reading for Band, Book 1	Norman Nelson & Billy Evans	Southern Music Company	$3.50/parts
Sight-reading Practice Pack, Level 1, Volume 1	Brian Rhodes	Twin Towers Music Publications	$75.00/score and parts
Complete Series of Sight-reading and Ear Tests	Elsie Bennett & Hilda Capp	Frederick Harris Music	$6.95
Play at First Sight	Lalo Davila	Alfred Publishing	$21.95
Sight-reading: The Rhythm Book	Alex Pertout	Mel Bay Publication, Inc.	$12.95
Rhythmic Tests for Sight-reading	Boris Berlin & Warren Mould	Alfred Publishing	$7.95

Sight-reading Studies: Essentials of Musicianship, Grades 2-4	James Curnow	Curnow Music	$69.00
Sight-reading Builders	James Curnow	Curnow Music	$15.95
Sight-read Any Rhythm Instantly	Mark Phillips	Cherry Lane Music	$9.95